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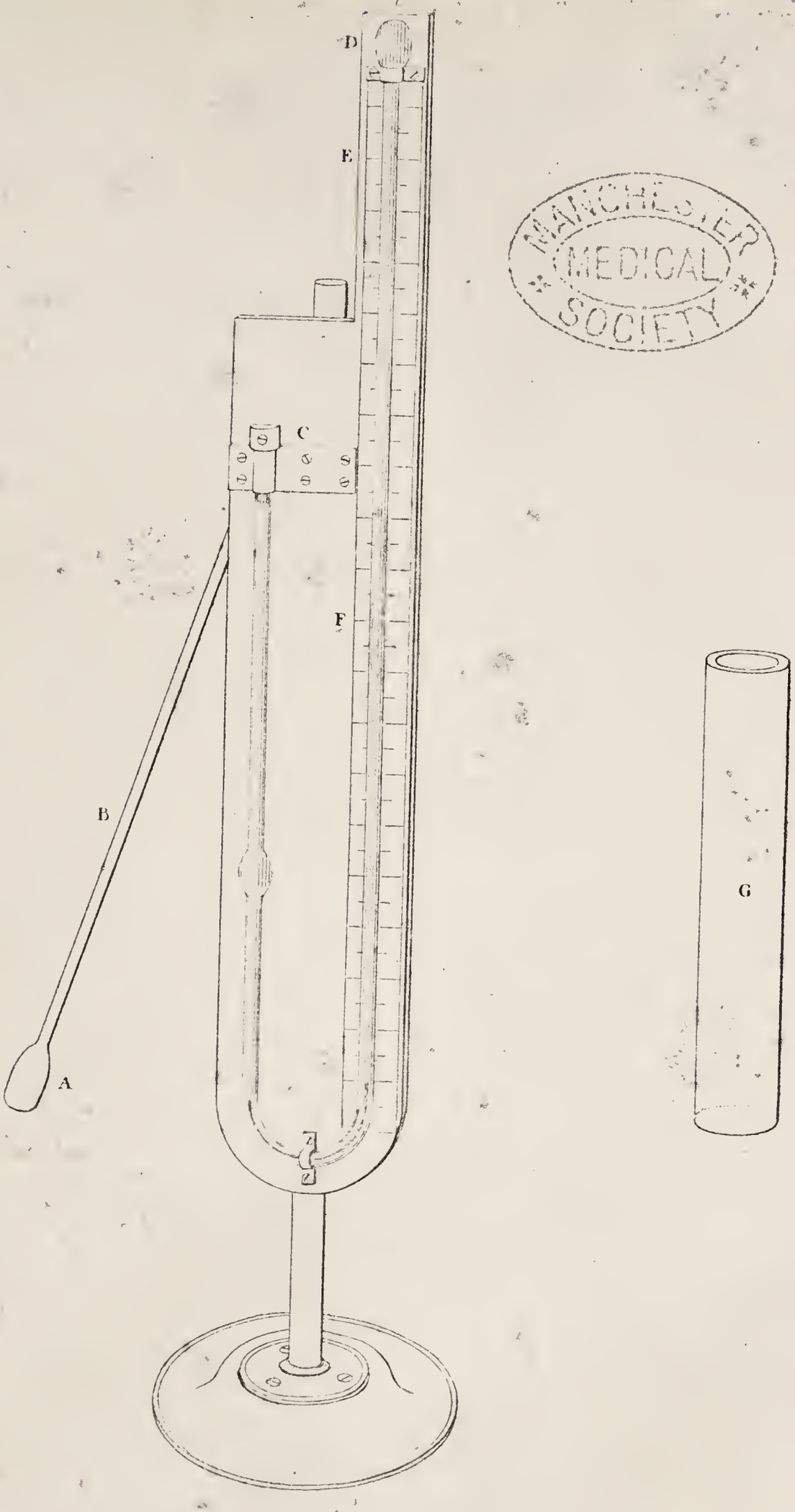
Hill's Pyrometer.



MANCHESTER MEDICAL SOCIETY

Scale of 12 Inches

THE MONTHLY

Medico-Chirurgical Review and Chemico-Philosophical MAGAZINE.

No. I.] MARCH 10, 1824. [NEW SERIES.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

MILL's PYROMETER.

THIS instrument, of which we have given a copper-plate engraving,* was invented by Nicholas Mill, Esq. and is intended, as its name indicates, to *measure heat;* or, more philosophically speaking, *caloric*. It is greatly to be lamented that no instrument susceptible of accuracy has hitherto been discovered; for we are quite at a loss to know what chemical changes take place with different degrees of heat above the boiling temperature of mercury. Mr. Children very justly observes, in a note in his excellent Translation of Thenard's Analysis, "We have no means of accurately measuring intense heats. The philosopher who should invent such an instrument would confer an essential obligation on the science of chemistry in general, as well as on many of the arts and manufactures; at present, the eye of experience is the only pyrometer the operator can rely on."

The changes that take place in the composition of bodies, by the mere application of heat, are very well known, and it is because no means have hitherto existed of measuring high temperatures, that compounds have been formed which could never afterwards be repeated.

A very familiar instance of the changes effected by a difference of temperature is fermentation.

If sugar and water be mixed together in certain proportions, and yeast be added, at the temperature of 50 degrees of Fahrenheit, no change will ensue; if the temperature be gradually raised to 55°, and increased to 70°, spirit will be generated; if the heat be still further increased, from 70° to 90°, acetic acid, or vinegar, will be produced; and again, if the temperature be increased to 150° Fahrenheit, all fermentation will be destroyed, and no change will be effected whatever.

From analogy it is but fair to suppose that similar changes may be effected in different, or even in the same body, by increment of heat in higher temperatures; therefore, the invention of an instrument susceptible of such accuracy as this carries upon the face of it, may be hailed as an important improvement in chemistry, the arts and manufactures, where heat is used in the process.

Sugar refiners, distillers, oil refiners, and metullargists in general, will doubtless be much benefitted by its use.

DESCRIPTION OF THE INSTRUMENT.—The metallic bulb and stem A. B. is composed of platinum, and is drawn down without any joint.

The bulb is hollow, and its diameter is about half an inch internally or less, according to the size of the instrument. The bore of the

* Made and sold by Messrs. W. and T. Gilbert, Leadenhall-street, Opticians; and Mr. Newman, Philosophical Instrument-maker, Lisle-street, Leicester-square.

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tube B. is perfectly cylindrical, and about 1-16th of an inch internal diameter; at the further end of this tube is attached, by an air-tight joint, a glass tube, C. which is bent in a triangular form. At the extremity of this tube is a bulb of glass D. of the same capacity as the platinum bulb A. with a funnel-shaped mouth, for the insertion of the mercury, which is afterwards hermetrically sealed. The scale E. is attached to the perpendicular glass, stem, F. and is graduated like a thermometer.

Heat applied to the platinum bulb expands the atmospheric air which it contains, and its pressure against the mercury repels it up the glass tube F. to which the scale is attached. As the heat is increased so does the air expand, and the scale indicates the degree of temperature.

The principle upon which this instrument is constructed is, that gases augment in volume in a progressive ratio, their expansion with increment of heat being uniform. No other known body possesses this quality so truly as gas, therefore this Pyrometer is an instrument susceptible of very considerable accuracy.

In its use some precaution is necessary; because, if the platinum bulb were plunged into the naked fire, it would be corroded and destroyed; a crucible of the form G. is therefore necessary, which is made of the most refractory clay; the platinum bulb, and part of the stem, is to be placed in it, and the empty part filled up with pounded charcoal or sand.

The extensive use to which this Pyrometer may be applied in the arts and manufactures, is at one view obvious.

The degree of heat of any furnace, kiln, or boiler, may be read off, on the scale, at a single glance, during every and any part of the process, and thereby certainty in the result insured.

ANALYSIS OF MEDICAL JOURNALS, &c.

London Medical and Physical Journal, *for March.*—In reviewing the Medical Journals, we shall take cognizance only of such articles which to us may appear to be most interesting, without entering upon the lumber usually met with in these periodicals.

LUSUS NATURÆ.

Art. I. *Case of Malformation in an Infant.*—By Edward Morton, M. B. Member of Trinity College, Cambridge, &c. (with an engraving.)

Mr. Morton gives the history of the case as follows: "The mother of the child is a patient of the Benevolent Institution, and was attended, during her confinement, by one of the midwives of that charity. The case was a presentation of the breech, and, as might be expected, proved tedious; but no unusual occurrence whatever took place during the progress of the labour. She is a well-formed, middle-aged woman, and has had five labours anteriorly to the present, the first of which produced twins. The children were well-shaped and healthy, and, with the exception of the twins, are now all alive. In her former pregnancies, no particularly unpleasant circumstances occurred; but, during the last day, she says, she has been much troubled with incontinence of urine. The labour did not occur till the period of ultro-gestation was fully completed."

The child, observes Mr. Morton, with the exception of those deviations, to be immediately noticed, from the natural structure, is a large, fat, healthy boy—the face, in particular,

is more pleasing than is usually met with so soon after birth. The head, neck, chest and body are well shaped, but both the superior and inferior extremities are more or less deformed. The arms, after having emerged about three inches from the trunk, terminate in conical extremities, precisely similar in appearance to the stump of an amputated arm. At the end of the right arm there is a small excrescence, like a pimple; while upon the left, at nearly the same place, there is a larger projection, with two smaller eminences upon it, as if nature here had made an imperfect attempt at the formation of a hand and two fingers. The penis is rather larger than is generally found in infants of the same age; the testicles are decidedly larger than usual. All the natural passages are pervious. The left leg and foot are correctly formed, but the thigh is only about one-half of its proper length; this defect, of course, brings the knee too near the body, and gives the whole limb an unnatural appearance.

The cause of this curious malformation is attributed by the mother to a fright, which she experienced when she was about six weeks or two months advanced in pregnancy; and the following is the account given by the mother:—

"She was one day standing at her door, when a beggar without arms, and who had also a wooden leg, came up to her and demanded some money; she refused to give him any; upon which he suddenly sprung towards her, making a motion with his mutilated arms, as if he would embrace her. She was very much frightened at the time, and mentioned it to a neighbour; but did not think of the circumstance again, till she saw the child, when it immediately returned to her recollection."

So many similar stories are within our recollection where the supposed power of the mother's imagination has operated on the fœtus in utero by deforming and mutilating it, &c. that we shall resign our pretensions to abler hands for some adequate explanation to account for these freaks of mother Nature.

This article, in the Medical Journal, is dated "15, *Eton-street, Pimlico; Jan. 30th*, 1824;" but we are not told at what particular period the circumstance in question occurred, further than at the time, Mr. Morton was officiating for Dr. Granville, &c. &c.

Art. II.—*Case of Cephalalgia, in which the Sulphate of Quinine was employed successfully.* By Thomas Bushell, M.R.C.S. London. (Communicated *through* Dr. James Johnston.) So much has lately been said about the efficacy of the sulphate of quinine in various complaints, particularly in intermittents, that we shall for the present decline offering any opinion upon it, or on Mr. Bushell's case of cephalalgia, leaving it to future opportunities to decide upon its merits. The sulphate of quinine may doubtless strut its little hour, and may fall as many other boasted remedies have done before it. At the same time we beg leave to superadd that, we have no antipathy whatever to exotics particularly when duly climatized.

Art. III.—*On the Medicinal Properties of Colchicum.* By Dr. Kinglake.

"It is not enough, (says Dr. Kinglake,) vaguely to affirm that an article of the unquestionable power of colchicum is an efficacious remedy in certain diseases, but it is necessary to ascertain and define the circumstances in which it may be given in the most safe and beneficial manner. The medicinal properties of colchicum reside in an arrangement of its component parts, that produces its narcotic qualities. Like digitalis, hyoscyamus, cicuta, belladonna, and other kindred articles, colchicum exerts a strong influence on *the sensorial principle of vital power.*"

After admitting the difficulty of

determining the maximum and minimum doses of colchicum, having previously made some remarks on the ambiguous practice of attempting to cure diseases by narcotics, &c. he observes that—

"The range of dose (of the colchicum) is from five drops to two drachms of either the spirituous or vinous tincture, or of the aqueous infusion, in three table-spoonfuls of water, or any other slender vehicle. The medicinal virtues of colchicum are readily yielded to either a spirituous, vinous, or aqueous menstruum. A saturated tincture is obtained by infusing four ounces of the dried root, sliced or bruised, during eight and forty hours, in eight ounces of either proof spirit or sherry wine; or an equally efficacious infusion may be procured by digesting, for about twenty-four hours, a similar quantity of the root in the same proportion of boiling water. The root has not been popularly administered in substance, in the form of either powder or pill; and it is probable that the active principle, on which its mechanical efficacy depends, would in that shape be too much encumbered with ligneous matter, to be capable of exerting its power in the direct and specific manner that results from its spirituous and aqueous solutions."

Twenty drops of either the spirituous or vinous tinctures, or of the aqueous infusion, will, in general, be found to nauseate, and often to move the bowels; though, says Dr. K., the quantity may be occasionally extended to 40 or even to 60 drops, without producing any sensible inconvenience. If the purpose for which colchicum is taken be not speedily accomplished,—if the pain intended to be subdued by it is not overcome, it becomes a subject of considerable importance to determine how long the use of the medicine should be continued. The quantity that may be required to remove the existing pain may occasion either threatening stupor, or unappeasable vomiting: when this is the case, either the brain or stomach, and sometimes both, are the situations in which its narcotic agency is more particularly exerted. As in other instances of powerful medicine, such as mercury, digitalis, arsenic, &c. the system becomes, sooner or later, saturated with colchicum, under its use. After this point is ascertained, small doses act with much greater power than larger had previously done. This should be an intimation for desisting from its farther use, lest the concentrated violence of its operation should prove seriously injurious. The acme, or extent of saturation that should not be exceeded, is shewn by small doses inducing nausea, vertigo, loss of appetite, and a sense of great increasing languor. Under these circumstances, the medicine should be suspended for a week or ten days, to afford an interval for its influence to become gradually dissipated, and finally extinguished, before it would be either prudent or safe to venture on resuming it, &c. &c.

We agree with Dr. Kinglake, that the prevailing practice of indiscriminately resorting to a remedy like that of colchicum, which acts by diminishing or suspending the natural susceptibility of being painfully affected, is too adventurous and doubtful to be warranted on any principle "of correct speculation," or practical safety. The agent, he very justly observes, that could so far alter the natural conditions of organic feelings as to induce temporary insensibility, may go to the unhappy length of annihilating life itself. The transition from the insensible state to that of death is but short, and may speedily be effected by the continued influence which had occasioned such a morbid reduction of natural feeling. Dr. Kinglake on Elaterium, as well as on Colchicum, will be read with much satisfaction, by every branch of the profession.

Art. IV.—*Appearances after Death in a Case of Hooping Cough.* By John Webster, M. D. of the Royal

College of Physicians of London; Physician to the Royal Infirmary for sick children, &c.

Dr. Webster,* who has lately directed the attention of medical men to that affection of the head, so commonly observed in hooping cough, and who has detailed a new method of treatment, which, it would appear, has been attended with considerable success, although it still remains to be proved, by additional experience and observation, how far the opinions expressed on the subject are correct; has given here an account of the appearances on dissection in support of his thesis, being the only fatal case that has come under his immediate observation; hence the publication of the papers alluded to, "although since that period, Dr. W. has had an opportunity of treating 184 cases, at the infirmary of sick children alone, according to the method formerly recommended, viz. the application of leeches to the forehead and behind the ears, blisters, and occasional purgatives."

"On opening the chest, about thirty hours after death, the external appearance of the lungs was quite healthy; no adhesions were found in any part of the thorax; when pressed between the fingers and thumb, the lungs had quite the emphysematous feel peculiar to healthy structure; and there was no induration or hepatization in any part of them. The larynx and trachea were slit open with a pair of scissors; and the ramifications of the bronchia were minutely and carefully traced into the different lobes of the lungs; but no diseased appearance whatever was observed at any point, except at the bifurcation of the trachea, where there was a slight blush of redness on its internal surface, with a small collection of frothy, but healthy mucus. There was no abration of surface, or unusual vascularity; indeed, it scarcely seemed different from the natural state; and the cut surfaces of any portion of the lungs, when squeezed, did not furnish large spots of mucus at the minute open ends of the bronchia. The heart was quite natural in appearance, and no water was contained in the pericadium. The abdominal viscera were healthy.

"After the scull-cap was sawn through, considerable difficulty was encountered in detaching it from the dura mater, which adhered firmly to its internal surface. When the brain was exposed, great vascularity was observed on both hemispheres; the convolutions were so pressed together as almost to make them disappear; it was necessary to press rather firmly with the handle of the scalpel, in order to separate them from each other. The pia mater was very vascular, and there was a good deal of effusion of a serous-like fluid under it, especially at the anterior and upper part of the brain, where a few spots of coagulable lymph were seen; the two hemispheres were also slightly adhering to each other at the anterior, by means of small shreds, like minute vessels, emanating from the pia mater. In the ventricles, about 2 ounces of serum were found: on the internal surface of these cavities, a number of small vessels, filled with blood, were found ramifying on it, particularly on the lower part or floor; and the choroid plexus, on the left side, was rather larger than usual. The cerebellum was healthy; but the vascularity observed on the superior part of the brain extended also to the basis, and, in the sheath of the medulla oblongata, nearly half an ounce of fluid was collected."

So far the new pathology of hooping cough is borne out, and it only remains for a regular accumulation of well-attested evidence and actual observation, to establish it on the basis of morbid anatomy.

Art. V.—*An Essay on the Treatment of the Nerves and the lining Membrane of the Teeth, when denuded.*—By Leonard Koecker, Surgeon-Dentist, Doctor of Medicine and Surgery, of the University of Erlangen.

This paper is stated to be copied from the American Medical Recorder. The author observes, that the manner in which the teeth, under certain conditions, have been treated, and the remedies heretofore supplied by surgery, have appeared to him, from the commencement of his practice, cruel and contrary to reason. "All authors," says he, "I have yet

* See page 90, &c. of Medico-Chirurgical Magazine.

been able to consult on this subject, concur in recommending the *destruction of the nerve of the tooth and its investing membrane.* For this purpose they advise the knife, concentrated acids, but particularly the actual cautery."

"The pain," observes Mr. Koecker, "which is caused by this operation of destroying the nerve, is so intense and protracted, and the idea of it so distressing, that few patients are willing to submit to it. But then the violent irritation created by it in the whole nervous system, but more especially in the adjoining nerves and parts, occasions, not unfrequently, an irritable or inflammatory constitution; in a few days after the operation, an inflammation of the whole mouth, which becomes soon concentrated upon the parts near the affected tooth, when tumefaction and suppuration take place. The pus being discharged from the swelled gums, the patient obtains some relief; but a perfect cure is not accomplished, which can only now be effected by the extraction of the tooth; an operation to which the patient soon flies for relief," &c.

Mr. Koecker observes, that a tooth deprived of its vitality by the destruction of its nerve, acts upon the parts with which it is immediately in contact, as a foreign dead body. It produces, he says, all the evil effects which are usually the consequences of a dead root of a tooth, but in an infinitely larger degree. From the moment a tooth is deprived of life, it becomes an useless and intrusive part in the animal economy, and causes an irritation with which the whole constitution sympathises. In the beginning, the suppuration at the root of a tooth exists in the fasciculus of the nerve, and extends afterwards to the cord of the nerve. The progress of the disease opens a way for the discharge of the matter through the canal of the root. If, therefore, a tooth, which has been treated after the first plan, be filled up with metal, the natural opening for the discharge of the matter is thereby obstructed, and the pus, being thereby confined and accumulated, works its way through the side of the socket, and produces a fistulous opening, which can only be remedied by extracting the tooth.

The author's method of operating in cases where the nerve of the tooth has become exposed, which is as follows, appears to be founded on more rational principles, as his principal object is to preserve the life of the lining membrane, and by this means saving the life of the whole tooth.

The instructions then laid down by Mr. Koecker are—1st, to put a stop to the caries, and consequently to prevent the irritation upon the internal membrane of the tooth. 2d, To suppress the hæmorrhage, and to cure the wound of the membrane, if it be wounded. 3d, To protect the membrane artificially against the action of all foreign or external agents.

To obtain the first of these objects, the author cuts away the unsound or dead parts of the tooth, so that every part of the carious cavity may be firm, sound, and white; giving it, at the same time, the best possible form for the reception of the metal, and its firm retention;—the cavity is next washed out with a little lock of cotton, fastened to a straight elastic probe, dipped in warm water, &c.

"If the lining membrane," observes the author, "is not wounded, I immediately plug the cavity with metal; but if there exits a wound and hæmorrhage, I resort to the treatment for the second indication, by which I endeavour to put an immediate stop to the bleeding, and to cure the wound," &c.

Mr. Koecker remarks, that at the commencement of his practice he was in the habit of suppressing the hæmorrhage by means of mild acids and styptics; these, however, he soon abandoned for the actual cautery, with which he readily effects an artificial cicatrization of the wound, and a stoppage of the bleeding.—

"I require," says Mr. K., "for the

operation, the following apparatus; 1st, A thin iron wire fastened to an ivory handle. The extremity of this wire I file to about the thickness of the exposed surface of the nerve; and bend the wire in such a manner as to enable me to touch the exposed part of the membrane, without coming in contact with any other part of the mouth. 2d, A tallow candle with a thick wick. I direct the patient to discharge all the saliva he may have in his mouth; and then let him incline the head backwards, against the head-support of any operation-chair. I put the candle into his left hand, and direct him to hold it so that the flame of it may be in a position horizontal with his mouth, and about eight inches from it; I now place myself on the right side of the patient, and, holding his lips with my left hand, so that the instrument may not touch them; I again dry the cavity as perfectly as possible, with a lock of cotton fastened to the point of the cauterizing wire. Having effected this, I throw away the cotton from the extremity of the wire, and make it red-hot in the flame of the candle. With the wire, thus heated, I touch the denuded part very rapidly, so that its surface forms an eschar; without, however, suffering it to penetrate deeply into the substance of the bone of the cavity, for this would inevitably bring on suppuration and destruction of the nerve. The nerve must be touched very quickly, and the cautery red-hot. It is sometimes necessary to apply it two or three times, before the parts are sufficiently cauterized. When the cautery is red-hot, it acts suddenly and almost entirely without pain; but when it is merely hot, much pain and inflammation are produced."

As air is among the most injurious external agents, when conjoined with moisture, upon an exposed nerve; if the nerve of the tooth be long exposed to the influence of these agents, its inflammation and consequent destruction are almost inevitable; the author therefore terminates the operation by passing to the third indication, viz. to protect the nerve against external injurious impressions, by filling up the cavity of the tooth with lead, which is used by Mr. Koecker for this purpose in preference to any other metal, from its not being so apt to excite inflammation and suppuration around it. Mr. K. has given cases illustrative of his successful practice, which in many instances may not be unworthy of imitation.

Art. VI.—*Application of Gymnastics to the Treatment of Disease.* By P. H. Clias, Esq.

We shall not entrench far upon Mr. Clias' table of gymnastic exercises, because we do not see any fun in them; and, until a new series be struck out for the exercise and amusement of convalescents and hump-backed animals, we shall always prefer leap-frog; hop, skip, and a jump, the skipping-rope, rocking-horse, hornpipe-dancing, the foils, gloves, dumb-bells, &c. &c.

"Prolonged inspirations, the patient sitting or standing.

"Deep inspirations, and counting a certain number without drawing the breath, or lying on the left side, leaning on the elbow, or singing without drawing the breath,"* &c. &c. with a variety of other apparently ridiculous anticks and whims, more calculated to generate than to remove disease; and not one of them capable of affording a laugh, which of itself would be a much more agreeable mode of exercising the lungs, diaphragm, &c.

Art. VII.—*A Report of the Trees, Shrubs, and Plants, used by the Indians of Upper Canada as Medicine, and for the purposes of Dycing, &c. with their Indian Names.* By Robert Kerr, Esq. senior Surgeon to the Indian Department in both the Canadas.

Among which are the Canadian balsam (PINUS BALSAMEA,) called by the Indians *otshogoton.* It is used by the Indians to fresh wounds; and it seems to have the same virtues as

* Among all Mr. Clias' gymnastic pranks, we see none to compare with that of a Mr. J. Longueville, the well-known author of a voluminous and elegantly written work on "Titles of Honour, &c." who can *stand* on his head while he sings a song, smokes a pipe, drinks a pint of porter, and eats a Welsh rabbit.

the balsam of copaiba. The DATURA STRAMONEUM, or thorn-apple, called by the Indians *ohickta;* the leaves and seeds of which are both used—the former, when bruised, with decided effect in rheumatism, &c.

SMILAX SARSAPARILLA, called by the Indians *yeyenthos-ononqua,* is found in the midland and western districts of this province, in great quantities. It is used by the Indians in the venereal disease, and is the principal ingredient in the famous Indian decoction, and is by them prepared in the following manner—Take of the root of sarsaparilla, sliced, one pound;—the bark of the root of sassafras, half a pound; the bark of the root of the prickly ash, (ARALIA SPINOSA) the same quantity; the bark of the swamp ash, near the root, the same quantity; soft water, two gallons: the barks to be chopped, the roots bruised—boil away to one gallon—half a pint every six hours is given to the patient, or a quart in twenty-four hours.

ARISTOLOCHIA SERPENTARIA—(make root)—called by the Indians, *joderese,* is found in the western parts of the province in great quantities, and used by them in intermittents, both in powder and decoction. When intermittents are prevalent in the province, the old settlers use a tincture of the sweet flag and snake-root, infused in whiskey, of which they take a tolerable good allowance in the morning, fasting, by way of morning dram, &c. &c.

Most of the remaining articles in this journal having been previously noticed in the old series of this work (Paris and Fonblanque's Medical Jurisprudence; Chevalier on the Functions of the Skin; Lobstein on the Sympathetic, &c.) we shall proceed to take a glance at the

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LONDON MEDICAL REPOSITORY.

1st. *A Report of the Medical Cases treated at the Kent and Canterbury Hospital, from April 11th to the 31st December,* 1823. By ROBERT CHISHOLM, M.D., Physician to that Institution, Member of the Royal College of Physicians in London, and Extraordinary Member of the Royal Medical Society of Edinburgh. (Communicated by Dr. JAMES JOHNSON.*)

The London Medical Repository has had the luck to communicate a long series of these Canterbury cases, to which it would appear there is no end; many of which, nevertheless, are not uninteresting, though as many more of them are nothing less than the mere changes rung over again of bleeding, purging, blistering, clystering, &c. with all the other paraphernalia, though with much less of the importance of general hospital practice. It would, perhaps, be much better if Dr. Chisholm, whom we perceive succeeds Dr. Carter as caterer for the Repository, were the cases treated in this hospital published annually, in a separate volume, than to make a public journal the immediate vehicle of record of the transactions that occur within it, from one year's end to the other. To say no more on the subject, the liberality of the proprietors of the Repository exceeds that of any other journal; as they never refuse to devote thirty or forty of their pages, at a time, to any one single article. This certainly saves much time to the editors, who have it always in their power, by such means, to supply in quantity what they are deficient of in quality. The cases treated in this report are, 1. Tussis Catarrhalis.—2. Tussis Phthisica.—3. Psoriasis Difusa.—4. Tympanites Intestinalis, from disease of mesenteric glands.—5. Softening of the brain, with chronic disease of the di-

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* Quere—Who or which is this Dr. James Johnson *through* whom so many communications pass, particularly to this journal?

gestive canal.—6. Melæna (treated successfully with the spirit of turpentine).—7. Hæmoptysis.—8. Psoas abcess.—9. Psoas abcess.—10. Epilepsy.—11. Ascites.—12 and 13.—Impetigo Figurata.—14. Porrigo favosa, which, being rather brief, we shall lay the substance of it before our readers.

The patient, a female, aged twenty-two, married, was admitted an out-patient December 26, 1823, with an affection of the scalp, which was covered with yellowish-green confluent scabs, exuding a viscid and excessively offensive matter; her hair was cut off, and she wore a cap of ivy leaves, sewed together, which she was ordered to discontinue.

"Mist. Cath. p. r. n. Decoct. Dulcamaræ, f. ℥j, ter in dies. The head to be washed night and morning with soft soap and water, and the "ung. Hydrarg. Prusiatis" to be applied."

"Jan. 2, 1824, is much better. Cont. med. et unguentum. An issue in the arm. Pil. Submur. Hydrarg. c. nocte. maneque. —9th. The head is quite clean. Complains of giddiness. Has not had the issue made, but will do so if the giddiness continues. Cont. the medicines. Free purging every morning."

"16th, Giddiness quite gone, but has a discharge from her ears; no fresh pustules; says she is quite well. To go on with her medicine a little longer."

In this case Dr. Chisholm observes that the irritation and itching were very severe, which a very few applications of the ointment subdued; and recommends the ointment to be tried by those in the frequent habit of treating cutaneous diseases.

We offer no remarks either on Dr. Chisholm's latinity, or his manner of drawing up cases for the press—the latter are got up with considerable brevity and correctness, a method we would recommend in preference to the monotonous and uncouth mode too frequently adopted of detailing superfluous incident, from hour to hour, and day to day, for months together, "vexing the dull ear-oil of a drowsy man" without either pleasure or profit.

"Should, (says Dr. C. in winding up the usual monthly allowance for the repository) any one condescend to notice any of the cases in this my first and hasty report, I hope to profit by a fair and candid criticism, which always does good; but
"Judex damnatur cum nocens absolvetur."

From this, we reasonably enough infer, that Dr. Chisholm has not been much in the habit of writing—his extreme modesty, however, does him no discredit; moreover, he could not have selected a better vehicle of improvement, as well as to acquire confidence, than periodical works, the nursery, in fact, of the genius for scribbling—the soil on the which the brightest talents have been matured and brought into notoriety. We advise, therefore, Dr. C. to write on; and, if the Repository will continue to publish sixteen octavo pages every month for him, he will rather increase than diminish in his own estimation, as well as in that of his readers.

II. *On the Treatment of Infectious Typhoid Fever.* — By James Parkinson, and J. W. K. Parkinson, esquires, members of the Royal College of Surgeons.

This article borders too closely on the speculative for us even to disjoint a part of it for the information of our readers. This is the first time we have ever witnessed two names to one article, and that article not occupying more than three pages and a half.

Messrs. Parkinson's additional treatment of infectious typhoid fever amounts to the discountenancing of stimulants, using the erect position, allowing a free access of cold air, &c.

This double-handed article is far from being unequivocal; lest, therefore, we should incur the tax of unnecessary severity, we shall, for the present, close our remarks, by indulging in the hope that the united efforts of Messrs. James and J.W. K.

Parkinson will shortly afford us a wider and more satisfactory field for digression, &c.

III. *On Phrenitis or Inflammation of the Brain in Children.* By Edward Thomas Bond, Esq. Member of the Royal College of Surgeons.

In this article, if we conceive right, Mr. Bond seems to think that the serous effusion, the result of inflammation of the brain, is not unfrequently taken for acute hydrocephalus, often misleading the practitioner, &c.; our limits prevent us from taking any ulterior view of it.

IV. *Case of Exfoliation, with the Loss of a Large Portion of the Upper Jaw, and of the Hard Palate, treated by Mechanical Means.* By James Snell, Esq. Dentist.

V. *Case of Infantile Erysipelas, in which the sulphate of Quinine was successfully administered.* By John Miles, Esq. Member of the Society of Apothecaries.

"A particularly fine and healthy child, at the end of the third week after birth, was observed, by its mother, on the evening of the 7th of December last, to have a blush of inflammation, merely, on the right side of the neck, without any apparent cause, and which, by the following morning (on which I was requested to visit the child) had extended across, and to the opposite side of, and a little way over, the upper part of the sternum, and was decidedly of a phlegmonodes character. By the evening of the second day, the inflammation had spread over a very considerable extent, and, in a few days, the whole surface was equally affected with some sloughy appearances, especially about the trunk: the œdema was very considerable, on the extremities particularly, but the skin gave way partially about the neck only. The child, from this extreme state of irritation, became convulsed, and appeared to be in the most hopeless state. For four days the subcarbonate of ammonia, with extract of bark, in regulated doses, was given; it had, however, no controul over the affection; and, in consequence of the stomach beginning to reject it, the sulphate of quinine was substituted, half a grain of which was given four times a day."

Mr. Miles very candidly observes, that he does not mean to affirm that the sulphate of quinine would have arrested the affection, had it been administered at the first onset of the disease; but that it certainly supported the system in a surprising degree subsequently, and prevented, in all probability, the supervention of extensive sphacelation. "One very important advantage attending the sulphate of quinine, is its convenient form for administration, which renders it a most useful remedy in infantile diseases."

VI. *On the Use of Colchicum in Tape-worm.* By Robert Chisholm, M. D., Physician to the Kent and Canterbury Hospital, &c.

The patient had been afflicted with tape-worm ten years. "He had applied to regular practitioners, and had tried the whole routine of anthelmintics, with only temporary benefit; his farrier too had given him "turpentine enough to kill a horse," but with the same result. Having had a case, in which the vinum colchici, given for rheumatism, brought away a considerable quantity of tape-worm, I was induced to try it, and, for that purpose, furnished Mr. ——— with two ounces of the vinum colchici, (made after Dr. Marcet's recipe)* and desired him to take a tea-spoonful, in a little water, two or three times a day. On the third or fourth day he passed a large quantity of worm, and continued to take the medicine for a week, but did not pass any more worm. He has been perfectly free from it for more than three years. It may be remarked, that he took no medicine whatever but the colchicum. I regret that I have not been able to learn if the medicine was equally efficacious in the case above alluded to.

Dr. Chisholm observes, that should this medicine be found, on further trial, to act with certainty, it will be a great acquisition, as the dose is small, and the taste by no means

* See page 17.

disagreeable; two most important requisites in medicaments of every description.

We have always found Madame Noufler's* remedy to bring away the tape-worm, where every other had failed; and, though it may happen not to succeed the first, or even the second time, a repetition of it at sufficient intervals will invariably remove this species of worm.

Art. VII. *An Appendix to the Critical Remarks on the London Pharmacopœia of* 1815, *consisting of such Preparations and Compositions as are not contained in that Work, but which, from the favourable Reports concerning their Medicinal Effects, merit the Consideration of the College of Physicians and the Attention of the Profession.* By J. H. Sprague, Esq. Member of the Royal College of Surgeons, London, &c.

As we perceive that Mr. Sprague is about to publish a translation of the London Pharmacopœia of 1824, with critical remarks, &c. we are rather indifferent about extracting or remarking on the present formulæ, many of which are extremely neat; we shall, therefore, suspend our labours until that period arrives, not from any apprehension that the respectable publishers of the Repository† might carry into effect the menace held out to our predecessors for having copied the greater part of Mr. Sprague's valuable article into the old series of the present work, but merely because we may not be led into repetitions when Mr. Sprague's translation appears; we shall, however, take a few of the prescriptions contained in the present part of the Appendix.

CONFECTIONS. — *Confectio menthæ viridis.*

℞ Menthæ viridis fol. recent, ℥ iv.
Sacchari purificat. ℥ xij.

Folia in mortario lapideo contunde; tum adjecto saccharo, iterum contunde, donec corpus sit unum.

"This confection possesses powerful anti-emetic virtues; and, as the properties of the fresh herb are well preserved, and thus can readily be obtained at all seasons of the year, it would be an useful addition to this class of Pharmaceutical preparations. I have found the following combination to restrain vomiting, and tranquillize the stomach after every thing else had been rejected, in cases depending on increased irritability of that organ, unattended by inflammatory action.

℞ Confectio menthæ viridis, ℈iv.

Fiat bolus statim sumendus, et 3tiis horis repetendus ungente ægritudine ventriculi, cum haustu sequente.

℞ Potassæ carbonatis, Gr. xxv.
Aquæ distillatæ, ℥ j.
Tinctura capsici, ♏ xx.

M. Fiat haustus, cum cochlear. ampl. succi lemonis recenti, in actu effervescentiæ hauriendus.

* The male fern root, (felix mas) from one to two drachms, in the morning fasting; about an hour afterwards, the submuriate of mercury and jalap, in the proportion of five grains of the former to five and twenty of the latter. The patient ought to lie down after taking the fern, and endeavour to retain it on the stomach, obviating nausea by means of lemon-juice, &c.

† The following note, among other papers, fell into our hands, which confirms the above remark; at the same time, we beg leave to state, that it is not our intention ever to espouse the bickerings, much less the wordy warfare of our predecessors, in any of the hostilities in which they may have been engaged, however successful their labours may have been crowned.

"Messrs. Underwood present compliments to Messrs. Cox and Son, they are sorry to be still obliged to complain, but they observe, that Messrs. Cox and Son continue to publish, in the Medico-Chirurgical Magazine, the papers of the London Medical Repository; and that, in particular, the papers of Mr. Sprague have been continued in many numbers; they beg to inform Messrs. Cox and Son, that, if they publish any more of the papers from the London Medical Repository, Messrs. Underwood will apply to the law of the land to protect their property from this system of pilfering."

To those acquainted with the customs and privileges of periodicals and public journals, no comment is necessary to the above, were it either our spirit or intention to offer any.—ED.

CONFECTIO SENNÆ COMPOSITA.

℞ Sulphuris Sublimati.
Potassæ Super-sulphatis, āā ʒj.
Confectionis Sennæ, ʒ iv
Syrupi Simplicis, q. s. Misce.
Dosis ʒj. ad ʒij. pro re nata.

"This is one of the most useful laxatives that can be given in cases of hæmorrhoids, (piles) and other affections of the lower intestines, attended with costiveness.

POWDERS.—*Pulvis Asari Compositus.*—

℞ Asari foliorum exsiccatorum ʒ iij.
Origani Foliorum exsiccat.
Lavendulæ florum exsiccatorum, āā ʒj.

"This powder is a very excellent sternuatory. A few grains, used as a snuff, at bed-time, is often found to be beneficial in tooth-ache, and chronic opthalmia, by producing counter-determination to the schneiderian membrane, and thereby exciting a copious secretion, which, on well established principles, has a tendency to relieve the disordered part."

Pulvis infantilis.—

Rhei Radicis pulveris, ʒij.
Magnesiæ Subcarbonatis, ʒx.
Zingiberis Rad. pulv. ʒss. M. Fiat pulvis.

"The above combination is well calculated to relieve the disordered state of the bowels, to which infants and young children are particularly liable, arising from acidities in the primæ viæ, which it corrects, while it acts as a gentle laxative.

Pulvis Jalapæ Compositus.—

℞ Jalapæ Radicis pulveris, ʒj.
Potassæ Supertatratis, ʒ ij.
Capsici Baccarum pulv. gr. xij.
Omnia, seorsim trita, permisce. Dosis a ʒss. ad ʒj. mane.

"This is an active form of purgative, and the nauseous taste of the jalap is diminished by the addition of the capsicum, which obviates its griping qualities."

Quininæ Sulphas.—Doses, gr. 5. sextis horis.

PILL MASSES.—*Massa Pilularum Aloes cum fero.*—

℞ Aloes Spicatæ extracte, ʒjss.
Myrrhæ Gummi-resinæ pulv. ʒij.
Extracti Gentianæ, ℈iv.
Ferri Sulphatis, ℈ij.
Theriac. Purificat, q. s. simul contunde, et in pilulas cxx. divide. Dosis, a ij. ad iv. semel, vel bis quotidie.

"In some indolent ulcers of the lower extremities, particularly in females of a leucophlegmatic or strumous habit, more especially if there be a vicarious discharge from them, with much œdema of the leg and foot, the alvine excretion at the same time being irregular, these pills will not unfrequently be found a very useful auxiliary to external applications."

Massa pil. Assafœtidæ cum cinchona.—

℞ Assafœtidæ Gummi-resinæ, ʒj.
Extracti Cinchonæ apt. ʒij.
Saponis Duri, ʒss.
Olei Pulegii, ♏xij.
Theriac Purificat. q. s. ut fiat massa: in pilulas xlviij divide; quarum capiat iij. vel. iv. nocte maneque.

"These pills are eminently useful in debilitated states of the stomach, attended with flatulency arising from dyspepsia, particularly in elderly persons.

Massa pil. capsici cum Rheo.—

℞ Capsici Baccarum pulv. ʒj.
Rhei Radicis pulv. ʒij.
Theriac. Purificat. q. s. Misce.
Fiat massa, in pilulas lx. distribuenda; quarum dentur ij. vel iij. paulo ante prandium quotidie.

"In dyspepsia, attended with impaired appetite, when our aim is to solicit the stomach to get rid of the residue of food, and quicken its action previous to another meal, these pills will be found well calculated to produce such effects, if washed down with a glass of tepid water."

Massa pil. Elaterii.—

℞ Elaterii extracti (Dr. Clutterbuck's prepar.) Gr. xv.
Potassæ Sulphatis, ℈j.
Saponis Duri, ʒj.
Zingiberis Radicis pulv. ʒjss.
Potassæ sulphatem et elaterium simul tere, dein cum Zingibere, et postea cum sapone contunde, et adde aquæ quantum

sufficit, ut fiat massa, in pilulas *sexaginta* dividenda. Dosis i. ad ij. Omne hora donec plene solutus sit alvus.

"The above pill-mass is the best form of giving elaterium as a cathartic in dropsical and other cases, where we wish to have recourse to this active purgative."

Massa Pil. tonicæ.—

℞ Zinci Sulphatis Purificati, ℈j.
Extracti Gentianæ, ℈iv.
Contunde massam, et divide in pilulas xl., quarum sumantur duæ bis die, cum haustu infra præscripto.—

℞ Infusus Gentianæ Compositi, ℥x.
Acidi Sulphurici Aromatici, ♏x.
Tincturæ Zingiberis, ℥j. M. Fiat haustus.

"These pills possess very considerable tonic properties, and are particularly useful in dyspepsia, where debility of the stomach is a permanent symptom of the disease. The draught is usually taken with them, as coinciding with the pills in their action."

MEDICO-CHIRURGICAL VARIETIES, &c.

The use of the flesh-brush recommended in Dyspepsia.—This simple instrument has been greatly overlooked by professional men, and its efficacy as an auxiliary too much despised.

In all cases of dyspepsia; it is of powerful use and essential importance, as well as to promote circulation in benumbed limbs.

Almost all cases of derangement of the stomach are produced by a sluggishness of the functions of the liver, and a want of proper circulation about that organ. Calomel is the medicine usually employed as a restorative.

The following may be considered a good formulæ:

℞ Hydrarg. submuriatis, gr. xv.
Pilulæ colocynth. compos. ℥j.
Pilulas quindecim fiat, capit unam, h. s. cum haustu sequente matina.
Magnes. sulph. ℥ji.
Infus sennæ, f. ℥j.
Mistura fiat.

One of these pills given every other night for a fortnight, and the mixture the following morning, accompanied with the use of the flesh-brush three times a day, will not fail to remove what Dr. Gregory calls *Primary Dyspepsia*. The flesh-brush is used to promote the circulation of the blood, and is unquestionably preferable to all other species of friction; it is applied by the patient himself rubbing the chest, stomach, and sides, till the skin becomes red, and until a slight perspiration is induced; a delightful glow of heat will succeed, and flatulency and oppression are very often instantly removed. At first, a soft brush only can be borne, but after a few times using, a common stiff hair-brush will be found most effective. An attention to diet is at the same time indispensably necessary, and the following, which we quote from Dr. Gregory, ought to be strictly adhered to. "In a weakened state of the digestive organs, it must have little given it to do; the body is strengthened, not in proportion to the quantity of food taken in, but to that which thoroughly digested. Differences in habits of life will, of course, lead to important differences in the kind and quantity of diet which should be permitted to a dyspeptic patient; but the following may be regarded as rules of very general application. It should consist of a due mixture of animal and vegetable food, but the former should be eaten only once a day. It should be thoroughly masticated. Great varieties of food, at any one time, should be prohibited, as leading to an indulgence of the appetite beyond the wants of the system. Articles of difficult digestion should be carefully avoided; such as all kinds of smoked, hard, dried, salted, and long kept meat; all those dishes where too much

nutritious matter is collected in a small space; eggs, for instance; potted meats, strong soups, and preparations of suet, fat, and butter; lastly, all raw vegetables whatever; with the exception of ripe fruits. Regularity in the hours of meals should be rigorously enjoined, and the patient directed to abstain from food at all other times."

Generation of Muriatic Acid in the Stomach, during the Process of Digestion.—It has long been known to physiologists, that a powerful acid exists in the stomach of animals during the digestive process.

Many experiments have been performed to ascertain the nature of this acid by different chemists, and which has generally led to the conclusion that it was the acetic; however, the experiments of Dr. Prout, communicated to the Royal Society, on the 11th of December, 1823, seem to set the matter at rest. He there states, that the saline matters found in the stomach, consist *chiefly of the alkaline muriates*. And also a large portion of *free muriatic acid*. We refer to his paper in the Society's Transactions, for the particulars of the Doctor's experiments.

On the Respiration of the Fœtus.—By M. Geoffroy-Saint-Hillaire.—This Naturalist has lately read a *Mémoire* in the Academy of Sciences of the Institute, "On the Respiration of the Fœtus," in which, proceeding on the principle that there cannot be organization without the combination of a nutritious fluid, nor yet assimilation without oxygenation or previous respiration, he endeavours to shew:—1st, That a respirable gas is present in the amniotic fluid, as shewn by the experiments of MM. Chevreuil and Lassaigne. 2d, That the fœtus, by means of its pores, as by so many tracheas, in the same manner as aquatic insects, is enabled to consume the air contained in the surrounding fluid, owing to the air being thus brought in contact with the venous blood which fills the capillaries of the skin; 3d, That the contraction of the womb and of the abdominal muscles keep up a certain degree of pressure; which is as requisite to the perfect performance of this process as to the ordinary act of respiration.—*Rév. Méd. Dec.* 1823.

Tumour developed in the Interior of the Cranium.—Observed by M. Esquirol, Physician to the Salpétrière.—A female, aged sixty years, was admitted into the Salpétrière, labouring under mental alienation. She had been seized in the fifty-third year of her age with chronic opthalmia, to which violent and continual headaches supervened, and vertigo, with want of sleep. The headach was felt chiefly in the left temporal region, where she found a small tumour, which gradually increased, and caused intolerable pain. After this state of distress had continued some time, somnolency, with mental alienation, came on; her ideas were confused, and her memory abolished. On her entrance into the hospital, the tumour on her head attracted considerable notice: it was nearly round, and apparently regular. Its elevation was about an inch, and its extent from before, backwards, about an inch and a half. This tumour seemed developed in the interior of the cranium, and to have destroyed the bone immediately over it, some remains of which still rested on its surface. It gave no pulsation, and pressure on it did not produce coma. Her hearing was lost on the same side (the left), but that on the right was perfect. Her other senses were unimpaired. The movements of the right side were a little enfeebled, and they became more so before she died. Death was preceded by febrile symptoms, slight coma, and involuntary

motions; nervous sensibility was not abolished.

Dissection.—The right hemisphere of the brain seemed more compact, and somewhat injected; the left was a little more dense, and presented, in the situation of the tumour, a depression proportionate to its projection internally. The cerebral tissue was very close and dense in this situation, without being disorganised. The internal projection of the tumour was covered by the external surface of the dura mater. This latter was sound in nearly its whole extent, excepting the centre of the portion on which the tumour rested, which presented a mamelonaceous or fungus production. This membrane could easily be separated from the tumour, except at the margin of this fungus: here vessels were seen passing from the one structure into the other. The temporal and orbital bones over the tumour were destroyed; its long diameter was three inches and a half, and its short two inches. Its texture was lamellated and spongy; and its tissue contained a reddish fluid, resembling that found in some cancerous tumours. M. Esquirol inquires—"Did the tumour produce the fungus of the dura mater; or did the latter produce the former?" —*Archives Génér. Dec.* 1823.

Anchylosis of the Second Cervical Vertebra with the Occiput.—M. Jules Cloquet presented to the Royal Academy of Medicine at Paris, at one of their late meetings, a morbid specimen representing the above singular consequence of disease. It was taken from a female of thirty-eight years of age, who had been seized, six or seven years before her death, with a rheumatic affection of the neck, of very great severity; in consequence of which she experienced great stiffness in the cervical region of the vertebral column, with a falling of the head backwards, and an inability of rotating that part. The patient died of a disease of the chest. The specimen shews that all the anterior portion of the first vertebra had been destroyed, so that the second had ascended, and thus become united with the occiput. The processus dentatus had entered the foramen magnum, and contracted its diameter. The origin of the spinal chord was much compressed, yet the patient only presented some obscure symptoms of lesion of the nervous system.—*Arch. Génér. Jan.* 1824.

On the Exhibition of the Sulphate of Quinine in the Cure of Intermittent and Remittent Fevers.—The sulphate of quinine has become pretty generally adopted in France for the above forms of fever. In a paper which Dr. A. Menard has lately published on this subject (Révue Médicale for Nov. 1823), he states, that several cases have come under his observation, wherein the paroxysms of the disease have been speedily cut short by the exhibition of this salt in large doses; but after several days the disease has sometimes returned, and attacks of inflammation, or engorgements of the liver or spleen, have frequently supervened, to the sudden arrest of the febrile paroxysms. He has observed these visceral inflammations and obstructions to have been so often followed by dropsical affections, that he considers these last named diseases to have been more common since this remedy was generally employed. This is what we would expect to happen, when the paroxysms of agues or remittents are put a sudden stop to, by very large doses of stimulating tonics, without the exhibition (either previously or during the period of their exhibition) of active deobstruents and cathartics. These latter means, we well know, are too much neglected in French practice.

On the Local Application of Belladonna in Puerperal Convulsions.—By M. Chaussier.—This eminent physiologist and accoucheur, after describing the state of the uterus during this very dangerous disease, and pointing out the curative means which should be employed in it, takes particular notice of the local application of belladonna. He considers that the chief obstacle to delivery consists in the spasmodic constriction and resistance of the neck and orifice of the uterus. With a view of removing this, and, at the same time, of remedying the local plethora or congestion to which the nervous system is subjected, he recommends the active means (depletions) usually inculcated in this country, with revulsants to the lower extremities, cold applications to the head, emollient and relaxant enemas, and properly conducted endeavours to effect delivery. In order to subdue the spasmodic constriction of the neck and orifice of the uterus more particularly, and thus accomplish the last-mentioned purpose, M. Chaussier has been in the habit of employing the belladonna in the form of ointment with very great success. This ointment consists of two drams of the extract of belladonna, moistened with a little distilled water, and incorporated by trituration with an ounce of simple cerate or prepared lard. He enjoins it to be applied directly to the orifice of the uterus; and, in order to accomplish this, he employs a small syringe, rounded at its extremity, with an aperture there sufficiently large to admit the point of the little finger. Having drawn back the piston, as much of the ointment as is equal to a small nut is to be placed in the aperture of the syringe, which, by the direction of the finger, is to be carried to the orifice of the uterus, with which, by pushing the piston, the ointment comes in immediate contact. The os uteri generally becomes dilated in about thirty or forty minutes after this application, without impeding the action of the fundus or body of this viscus. This medicine has been employed since 1811 by M. Chaussier, and, under his directions, by Madame Lachapelle and Madame Legrand, and its use made public both in his lectures and in several pharmaceutical works. As the introduction of belladonna into obstetric practice has been arrogated by more than one accoucheur of this metropolis, we think it just to assign the practice to the real originator of it.

On the Specific Action of certain Substances on particular Portions of the Encephalon.—By M. Flourens.—It is considered that certain substances introduced into the digestive organs, or into the vascular system, act chiefly or specifically on the brain. But it has not yet been explained how these substances, acting all on the same organ, produce, nevertheless, phenomena essentially different. M. Flourens, whose former experiments tend to shew that the encephalon is composed of several parts, performing essentially distinct functions, entertained the idea of ascertaining, by direct experiments, the cause of the diversity of effect, just alluded to, in the proper or specific action of each of these substances on each of the different parts of the brain.

It appears from these experiments of M. Flourens:—

1st, That, up to a determinate dose, opium acts exclusively on the cerebral lobes; belladonna on the corpora quadrigemina; and alcohol on the cerebellum.

2d, That the physical results of the action of each of these substances on each of these parts are absolutely the same as those from mechanical lesion of these parts. As, for ex-

ample, when a substance acts only on the lobes of the cerebrum, the functions of those lobes are alone injured: when on the cerebellum solely, those of this organ are deranged; and when on the corpora quadrigemina, those of this organ are injured, &c.

3d, That the action of each substance always leaves, after death, and points out, even during life, signs which may serve to distinguish the affected organ from the others.

4th, That camphor, æthers, &c. act in a manner analogous to alcohol; the watery extracts of henbane and bitter lettuce, &c., in a way similar to opium, &c.

The experiments on which these inferences are founded have been repeated before MM. Cuvier, De Humboldt, Portal, Dulong, and Dumeril, who are commissioned by the Institute to report upon the *Mémoire* of M. Flourens.—*Rév. Méd. Jan.* 1824

Formula for preparing the Vinum Colchici, introduced by the late Dr. MARCET *into Guy's Hospital.*

Take the recent bulb of the Colchicum, (meadow saffron) raised in July or August, sliced and bruised, 26 ounces.
Sherry wine, 24 ounces,
Rectified spirit, 2 ounces,
Shake the mixture twice a day, for seven days, and then filter for use.

Mr. BRODIE'S *form of prescribing the Sarsaparilla.*

℞ Sarsaparillæ radicis concisæ et contusæ, ℥ jss.
Glycyrrhizæ Rad. contusæ, ℥ ss.
Coriandri seminum contusæ, ℥ ij.
Liquoris potassæ, ℥ j.
Aquæ ferventis, Oj.
Macera per horas xxiv, in vase leviter clauso et cola. A third part of this infusion may be taken thrice a day, or the following:

℞ Sarsæ rad. concis. et cont. ℥ iv.
Glycyrrhizæ rad. cont. ℥ j.
Liquoris calcis, Oiv.
Macerate as above—a pint daily.

Tincture of Nicotiana in Ischuria.—Dr. WESTBURG, of Halmstad, in Sweden, has derived great advantage from the use of tincture of nicotiana in the treatment of ischuria: he gives twenty drops every hour, in a glass of linseed tea, and he has universally observed the most beneficial results, sometimes even from the second or third dose. He also employs this remedy successfully in blenorrhœa, when the patient can only make water drop by drop.—(*Revue Medicale*, Nov.)

MR. EDITOR,—SIR,—I have taken the liberty of sending you the following paper for insertion in your valuable magazine, relating to an extraordinary coincidence, which, in all probability, is not generally known.

Among the diseases which, from time to time, have periodically arrested the progress of population, the small-pox, it is universally acknowledged, has been most pre-eminently conspicuous.

It is to our illustrious countryman, the late Dr. Jenner, that humanity stands indebted for one of the most important discoveries of which any nation or country can or will ever have to boast.

Strange, however, as the following may appear, it is a singular and well-authenticated fact, that vaccination was not unknown to the inhabitants of the new world, at the very time, if not before, Dr. Jenner had promulgated his discovery, or, perhaps, had even contemplated the possibility of its existence.

The small-pox was introduced into South America about the year 1520; it seemed only to exercise its ravages every 17 or 18 years. In the Equinoxial regions it had its periodical returns, at which times its ravages were of the most frightful description; and in the year 1790, it swept away, in the capital of Mexico alone,

more than 9000 individuals; but since the introduction of vaccination into this city, which was in the year 1804, through the activity and zeal of Don Thomas Murphy, the small-pox has been viewed as a disease of rather an insignificant nature; and inoculation for it had already accustomed the Indians to an idea that it might be useful to give themselves a transient malady, to guarantee them from the effects of one of a more serious nature.

Until the month of November, 1802, vaccination was unknown at Lima; at this time, the small-pox prevailed throughout the whole coast of the South Seas. The merchant vessel Santo Domingo de la Calzada put into Lima, on its voyage from Spain to Manilla. An individual of Cadiz had the good sense to send, by this vessel, some of the vaccine virus to the Philippine Islands; advantage was taken of this circumstance at Lima; M. Unaune, professor of anatomy, and the author of an excellent treatise on the Physiology of the climate of Peru, vaccined several individuals with the virus brought out by this vessel. Nevertheless, M. Unaue, havingo bserved that the persons vaccined had all had the small-pox in a singularly benign manner, he made use of the variolous poison, for the purpose of rendering the epidemy less fatal, by the ordinary mode of inoculation. By this means he recognized, through an indirect channel, the effects of a vaccination which had been supposed to have failed.

It was in the course of this same epidemy, in 1802, when chance brought to light that, for a length of time, the beneficent effect of vaccination was known to the country-people of the Peruvian Andes. In the house of the Marquis Vallambroso, a negro slave had been inoculated for the small-pox; no symptoms of the malady appeared. The inoculation was about to be repeated, when the young man *declared he was very certain he should never have the small-pox*, because, in milking the cows, a sort of cutaneous eruption had broken out upon him; caused, according to the opinion of the old Indian shepherds, by the contact with certain tubercles which are sometimes found upon the teats of these cattle. Those who have had this eruption, said the negro, never have the small-pox. The Africans, and particularly the Indians, evince great sagacity in observing the character, manners, and diseases of the animals with which they habitually live; it must not then be wondered at, that since the introduction of horned cattle into America, the lower orders should have remarked, that the pimples found on the teats of cows, communicate to the herdsmen a mild kind of small-pox; and that those who have had it, escape the general contagion, at the time the great epidemies prevail.

I am, Sir, &c. M.

CHEMICO-PHILOSOPHICAL MISCELLANY, &c. &c.

Rough Analysis of the dark grey Silver Ore, extracted from the Mine of Valenciana in Mexico, possessed by the Association for assisting in working the Mines of Mexico, and other Parts of Spanish America.

a—Five hundred grains of the ore were pulverized and treated with dilute nitric acid, by which every thing soluble in that menstruum was taken up.

b—The silver contained in solution was precipitated by muriate of soda, and afterwards repeatedly boiled in distilled water, to free it from any muriate of lead which

might have been precipitated therewith. It was then fused with carbonate of soda, and yielded a button of *pure silver*, weighing thirty-six grains.

c—The solution was next tried with sulphate of soda for lead, which was present in small quantity.

d—It was then further tried with prussiate of potash, which threw down a copious blue precipitate, indicating iron in great abundance.

e—A white powder being observed with the gangue or matrix of the ore, this latter was washed, and the powder collected and exposed to a red heat; it burnt with a blue flame, giving out sulphureous fumes, thus shewing the presence of sulphur.

f—A small portion of this powder was fused with black flux, and a small bead of antimony obtained.

g—The gangue, or matrix, was afterwards treated with nitro-muriatic acid, and a further quantity of lead, antimony, and iron obtained.

600 grains of this ore, therefore, consists of

Pure Silver . . .	36 grains.
Lead in small quantity .	
Iron in large quantity .	
Sulphur	
Antimony	
Gangue, or Matrix, consisting principally of Silex	

g—Another part of the ore was treated with nitric acid, and a plate of iron immersed in the solution after extracting the silver and lead, which, when washed with dilute muriatic acid, and fused with black flux, gave a bead of copper weighing 10 grains; 600 grains of this ore therefore gave

Pure silver -	35 grains
Copper - -	10 grains

It appears from the above analysis, that the immense wealth accumulated by the former proprietors of this mine did not proceed from the richness of the ore in silver, but from the great quantity in which it was obtained; for the proportion of silver does not much exceed seven per cent., which is very trifling indeed, compared with other ores of this metal; nor are the other constituent parts of it of sufficient importance to demand attention.

There is also another variety of silver ore, found in the same mine, of a *light grey* colour, of which we shall give an analysis in our next.

Herculaneum and Pompeii.—The Preservation of the Houses and their Contents by a natural Chemical process.

These ancient cities are situated at the base of Vesuvius, and were overwhelmed by an eruption of that volcano, in the first year of the reign of the Emperor Titus, and the 79th of the christian era. Their precise situation was discovered by some labourers, who struck upon a statue, in digging a well. Many were afterwards dug up and sent to France, by the Prince of Elbeuf; but little progress was made in the excavation till Charles, Infanta of Spain, ascended the Neapolitan throne.

The panorama, now exhibiting, of these ancient cities, does not fail to recal to the mind the state of civilization and grandeur of the ancient Romans.

In viewing this delightful scene, we see a city precisely in *statu quo* as it was 1700 *years ago—there is not such another on the face of the earth!* The ashes of Vesuvius enveloped it as with a cloud, and immured its inhabitants as within a tomb; hot from the crater, they dissipated all moisture without injuring the most delicate furniture, and a stream of lava afterwards overflowed their surface, which at once rendered the mass impervious to air and moisture—this is the cause explained why the ruins of Herculaneum

and Pompeii, after having been hidden from the eye of man for the space of nearly two milleniums, still retain their ancient beauty and splendour.

The structure of the edifices convinces us how little we have to boast of improvements in modern architecture; the paintings, still gracing the walls, exhibit no small degree of perfection in the arts, and the very pavement in the streets may still vie with the boasted empress of cities.

Rome was!—Alas! how transient is human glory!

On Organic Salifiable Bases. *By* MM. Dumas and Pelletier.—The following is the analysis of these compounds, given by these chemists. From the Annales de Chimie et de Physique, vol. xxiv. p. 191.

	Carbon.	Azote.	Hydrogen.	Oxygen.
Quinine	75·00	8·45	6·66	10·43
Cinchonine	76·97	9·02	6·22	7·79
Brucine	75·04	7·22	6·52	11·21
Strychnine	78·22	8·92	6·54	6·38
Veratrine	66·75	5·04	8·54	19·60
Emetine	64·57	4·30	7·77	22·95
Morphine	72·02	5·53	7·01	14·84
Narcotine	68·88	7·21	5·51	18·00
Cafeine	46·51	21·54	4.81	27·14

MM. Dumas and Pelletier calculate that quinine is constituted of

	Atoms		
Carbon	60	or in 100 parts nearly	75·38
Azote	3		8·72
Hydrogen	30		6·15
Oxygen	3		9·85
	96		100·00

If, however, the weights of the atoms be calculated as given by Dr. Thomson, Dr. Henry, and Mr. Brande, it will be found that the number of atoms which enter into the constitution of this, and probably the other substances, are much fewer, and the calculated result is rather nearer that obtained by experiment.

Carbon	20 atoms	6 × 20 =	120	or in 100 parts 75·00
Azote	1	=	14	8·75
Hydrogen	10	=	10	6·25
Oxygen	2	8 × 2 =	16	10·00
	33		160	100·00

In concluding, the authors observe, that the results of the analyses of the substances in question are equivalent to

	Carbonic acid.	Azote.
Quinine	100	5·1
Cinchonine	100	5·0
Strychnine	100	4·9
Narcotine	100	4·5
Brucine	120	5·0
Morphine	100	3·2
Veratrine	100	3·2
Emetine	100	3·1
Cafeine	100	20·0

In reference to the last mentioned substance, MM. Dumas and Pelletier observe, that no particular memoir has hitherto appeared upon it. It was discovered in 1821 by M. Robiquet, in his researches to discover quinine in coffee. The authors of this paper obtained the same principle nearly about the same time, but the priority is due to M. Robiquet. The properties of cafeine are stated to be white, chrystalline, volatile, and but slightly soluble.

The method of analysis adopted was that suggested by Gay-Lussac; the peroxide of copper employed was prepared by calcining the nitrate at a dull red heat; it was then carefully washed, and again heated at the same temperature to expel the moisture, and before using it was moderately heated in a platina crucible, and weighed while still warm.

MM. Dumas and Pelletier adopt the specific gravity of gases as determined by Dulong and Berzelius, and their calculations are founded on the weights of atoms given by the same chemists.

On the Use of the Actæa Racemosa in Phthisis Pulmonalis.—The following account of the effects of this drug is given by Dr. T. S. Garden, of Charlotte. We regret that he does not mention either the dose of the medicine, or the mode of its exhibition.

"I am probably the only physician who has ever used it in his own person, or who has any knowledge of its virtues and effects in disease, except those in my immediate section of country. This medicine has been in common use with the vulgar, in many parts of the western country, for some time past as a remedy, and I have for a considerable time laboured under a conviction of its efficacy, from actual experiment upon my own person: I have, however, delayed giving it publicity until other evidence could be adduced, lest I should be thought the boasted discoverer of a remedy, which had no claim to merit except in the imagination of its inventor. I design merely to state facts, which can be supported by the testimony of those physicians who were acquainted with my own situation, and of those gentlemen who, in conjunction with me, have witnessed its effects upon others. I can ascribe the degree of health which I enjoy at present to nothing but the use of this medicine, aided by suitable regimen; and nothing but utter despair, and entire extinction of all hope of recovery, together with a want of confidence in all others, induced me, upon the bare testimony of vulgar report, to hazard the experiment. In a short time my estimation of its virtues were greatly increased, and the expectations which had been excited of its ultimate success were finally realised. Shortly after commencing the use of this medicine, the hectic paroxysms, which had attended me for some time previous, were entirely checked; the nocturnal evacuations from the surface of the body, to which persons affected with phthisis are subject in the secondary stages, began to diminish; the expectoration of a fluid from the vessels of the lungs and bronchia, resembling pus in appearance, was speedily arrested; the cough became much less troublesome and less frequent; my pulse, which for some time before had never been lower than from 100 to 120 pulsations in the minute, was reduced to the medium standard; the pain in my right breast and side left me; my strength and appetite began to improve: and I speedily abandoned the use of all medicines; or any other means, except attention to regimen and exercise. A period of twelve months or more had elapsed, from my primitive ill health to using this medicine, during

which time I had bled freely and copiously, kept up a constant discharge from the surface of my breast, by the use of blisters, setons, &c. and adhered strictly to a vegetable regimen, but without any relief.

"It was the opinion of the celebrated Dr. Rush, that, if there existed a remedy for hectic fever, it was a tonic, and that it belonged to the vegetable kingdom; and such is evidently the nature of the *actæa racemosa*. Like the digitalis, it disorders the sensorium, and operates in a powerful manner upon the secreting and absorbent systems. When exhibited in a full dose, it prostrates in a distressing degree, producing nausea, vertigo, pains of the extremities, anxiety, dilatation of the pupil, quick small pulse, with universal restlessness and uneasiness. These effects are immediate and transitory; its ultimate and remote operation is the converse of the above. It is this which gives it the supremacy over all other medicines of the same class." —*(American Med. Recorder.)*

Eritrogene—A new principle, to which the name of Eritrogene has been given, is described by Signor Bezio. In examining the body of a person who died of jaundice, in the hospital at Venice, a fluid was found in place of the bile, which bore none of the characters of that secretion, and which was given to Sig. Bezio, who read an account of it to the Atheneum at Venice. The contents of the gall-bladder were not homogeneous, but consisted of a clot of filaments in an adhesive fluid, about as thick as honey; the liquid portion was purple, and the clot white, with black and red spots; the smell resembled that of putrid fish. By washing, the soluble portion was separated; it was then heated with water, and agitated, by which means the adipose portion separated, and collected on the surface. It was removed when cold, and dried on blotting-paper. It was of a greenish colour, and had the odour of bile. The fibrous matter collected at the bottom of the vessel was found to be fibrine, but little altered; the fatty matter, on examination, yielded stearine and elaine: the part which remained undissolved was of a fine green colour, and, when boiled in fresh alcohol, formed a green solution, which, by partial evaporation, yielded rhomboidal crystals of an emerald green. This is Eritrogene. The substance so named is transparent, flexible, unctuous, has the odour of putrid fish, but no taste. It fuses at 110° of Fahrenheit, and, if heated to 122°, it becomes volatilized, yielding, in contact with the atmosphere, a purple vapour: it is not soluble in ether or water, but is readily dissolved in alcohol. It has a great affinity for nitrogen; and the azotated eritrogene is said to be precisely the same as the colouring matter of the blood. Bezio further remarks, that eritrogene, or something very like it, exists in the chyle; and conjectures that, when it reaches the lungs, nitrogen is absorbed as well as oxygen, and colour thus given to it.—*(Journal de Fisica*, No. vi.)

Phosphorescence of Acetate of Lime.

Sir,—Not being aware that the phosphorescence of this salt has been noticed by any chemical writer, I have taken the liberty to forward you the observations I have made in its peculiar properties in this respect. Dissolve any quantity of acetate of lime in water, and place it in a sand heat, in a wedgwood-ware dish, evaporate to dryness, without disturbing it. When quite dry, let the bulb of a thermometer be rested on the bottom of the dish, and when the temperature has attained the 250° of Fahrenheit, the lime will be found to

adhere very firmly. If light be now excluded, and the acetate strongly rubbed with a stiff spatula, it will become highly luminous; the high temperature required for producing this appearance is peculiar to this substance and fluate of lime.

I am, Sir, your obedient Servant,

NICHOLAS MILL.

March 5th, 1824.

From the Annals of Philosophy.

SIR,—When, in the Annals for February last, you did me the honour to publish my remarks on the enigmatical cave at Pickering, which has given rise to so many unsatisfactory conjectures, I confess I was carried away with the then prevailing opinion, that the remains of the animals found there had been localized to the spot; and their assembling there for safety was, in that case, not improbable, at the rising of the waters of the general flood. But I have since felt, that the objection founded on climate is insurmountable; and that they could not have been dragged there by the hyænas is now, I believe, the most general belief; for not to insist on what Dr. Knox asserted, at the Wernerian Lectures, reported in the Physical Journal, No. 16, viz. that the hyænas of Southern Africa are not in the habit of conveying their prey away into dens, it seems impossible to reconcile to reason, that they should have found such various animals near together, as the elephant, rhinoceros, ox, horse, hippopotamus, tiger, bear, and wolf; or, if they had, that they should have been able to effect such a labour, so much beyond their united strength, or to have destroyed all the skulls by even their forcep jaws; neither can any one be made to believe, could all this be proved, that such animals as these antidiluvian hyænas are described to be, in point of magnitude, would have left even the smallest remains of such small bones as those belonging to the rat, mouse, raven, pigeon, and lark. Ducks and partridges would have been but a mouthful to them; and it is not very easy to imagine, by what means they could be able to catch them, any more than rabbits and hares.

Let us suppose the gnawed marks on the bones to be established by comparison; it proves nothing of their having been gnawed where they were found; and, as to the polish acquired by their feet, and hair passing over them, that really must always be considered as conjectural, and proves nothing as to locality. Admit even that a considerable portion of original gelatinous matter, (as has been asserted) remained, it could only shew, that the period since the destruction of these animals had not been very extended, nor that they died there. Again, if no skull was left entire, but only *chips* found, and solid parts of bones, or angular fragments projecting through the stalagmite above, we should be a little cautious in naming so many species, and varieties of species, of small animals: even Messrs. Cuvier and Clift might startle at this difficulty, one would think. But, as this is a subject on which so few are competent to decide; and so much has been advanced on the continent, by supposed infallible judges, that we must be silent on that head: only it does seem strange, that, if some are so evidently gnawed, more are not so; and I do not find one in that supposed state, among the immense mass that Mr. Cottle has collected from Oreston; and, as some one must have been left, if this was their den of slaughter, why have not their skulls been found—at any rate that of the last survivor? Stress has been

laid on these bones having been rolled; but I think that could not have been, or pebbles found with them, in the places where they are found; for, if granite rocks have been proved to have been removed by water hundreds of miles, surely bones, floating in masses, might have been conducted by currents, from very distant parts from those where we find them; and, being lighter, they would not have mixed with gravel or beach stones at the retreat of the waters, but probably mixed up with mud, and entangled in each other as they fell into these cavities on the retreat of the waters; but probably washed up with mud, and entangled in each other, they fell into these cavities on the retreat of the waters, or were carried in whirlpools, so as, after receiving many fractures, to be deposited at length in a level bed such as they were discovered in, resting on the original stalagmite, and when all was dry, receiving in the course of ages an additional covering of a similar deposition.

This conjecture also accounts for their intermixture as well as fractured state; for rolled bone, and wood, or ivory, are only invariably found among ancient beaches of gravel, such as now lies below the land at Shorehampton, near Bristol, and which has produced many specimens, wherever the mine is opened to gravel Lord de Clifford's park there, a deposit undoubtedly left there on the borders of the Severn channel, at the retreat of the waters of the flood.

To come at the truth will be difficult, and, therefore, we are obliged to professor Buckland for the great pains he has taken in bringing forward all that has hitherto been known on a subject that seems so strongly to corroborate the scripture history of the deluge; but we must not, in the history of natural events, look to any authority but that which is founded on circumstances applicable to the event under discussion.

Yours, &c. G. CUMBERLAND.

SILVER MINES OF MEXICO.

Great public interest has been excited of late by the formation of companies in London, whose object is to work the silver mines of Mexico, and who have raised large capitals for that purpose. We have made the best enquiries in our power, upon this subject, and we are enabled to lay before our readers some correct information, which will, we have no doubt, be acceptable, as it relates to undertakings which may have great influence on political events, may enlarge our commercial relations, and extend the field of scientific research.

The mines of Mexico, though rich, have been abandoned, owing to the joint operation of natural causes and of others, arising from long continued domestic contentions. The first of these causes relate principally to the difficulties arising from increasing depth, and the consequent inefficiency of the means possessed to extract the water and the ore; these, it is expected, will be easily overcome by the application of our machinery, directed by competent skill, to be supplied by persons sent from this country; the other obstacles are likely, it is hoped, to be removed, by the settlement of differences among the provincial governments, and the arrangement of a legislative body, agreeable to the whole.

The first company which has contracted for mines, is called the *Anglo-Mexican Mining Association*, and possesses a capital of one million sterling, in shares of one hundred pounds each. The mines which

are engaged are principally in the *Real of Guanaxuato*, near the city of that name, about 200 miles N. W. of the city of Mexico; they include that of Valenciana, which is stated to have been carried to the extraordinary depth of 350 fathoms. This mine is spoken of at large by Baron Humboldt, in his interesting works upon Spain, and is reckoned by him to have alone produced one-fourth of the silver of Mexico. It was originally quite free from water, but has been inundated by the influx from an adjoining mine Zepryac, and has been nearly filled in the last 12 years, owing principally to the neglect caused by civil commotion. There are other mines also situated upon the same vein *(the veta madre* of Guanaxuato), some of which will be worked by the Company. Several steam-engines, as well for pumping up the water, as for drawing up the ore, and for stamping and reducing them to a proper state for amalgamation and smelting, are already constructing in this country, and a select body of miners from Cornwall are engaged to go out and conduct the various operations. The enterprize will be entrusted to Colonel Robinson, an officer of distinguished activity and merit, who will shortly leave England, to commence operations. The Directors in London have been chosen from among gentlemen of great respectability and influence; and the establishment, which will be of an extent commensurate with the magnitude of the object, is arranging under the direction of John Taylor, Esq., whose connexion with the largest mines in this country is very well known. The second Company consists principally of individuals engaged in mining, in England, who have undertaken to work the mines in Real del Monte, about 60 miles north of the city of Mexico, belonging to the Conde de Reyla, a distinguished Mexican nobleman; and also the mine of Moran, nearly adjoining the property of Thomas Murphy, Esq., who was long resident in the country, and of Don Fausto del Huar, formerly president of the Mining College of Mexico. This company has raised a capital of £200,000, in 500 shares of £400 each. Their arrangements here are also entrusted to Mr. Taylor, but we have not heard whether their foreign appointments are made, although it is understood that their preparations are in great forwardness. The mines of Real del Monte are not represented as so rich as those of Guanaxuato, but they are spoken of by Humboldt as having been very productive. They are more troubled with water than the others.

The prospectus of another Company has also appeared, whose capital is to be £240,000, in 6,000 shares of £40 each. This association is formed to work mines, to raise or purchase gold and silver ores or metals, and to smelt, reduce, refine, and separate the same, by the combination of European skill and capital with Mexican interests through the medium of Don Lucas Allaman, a native of, and residing in, Mexico; but it has not been deemed expedient to enter into actual contracts for working mines, until the association be formed, and the extent of its capital ascertained. If no injudicious rivalry should take place, which would be absurd, where the field for exertion is so large, they may mutually support and assist each other, and the chance of ultimate success may thus be much increased.

As far as we can form an opinion, we should think that these speculations offer bright prospects of advantage, but that they are attended with many and obvious risks (namely) political events, the uncertainty

of all mining operations, the difficulty of obtaining a faithful administration so far from home, and the obstacles to be expected from the prejudices, the cupidity, or the bad faith of the Mexican proprietors. With regard to the interference of Mexican influence, to the detriment of the English companies, supposing the desire of it to exist, it is obvious, that self-interest must be esteemed the strongest motive; and, as the mines will continue to exist only by the exertion of a peculiar skill in the supply and management of complicated machinery, and which skill must for a long time be vested in the English part of the establishment only, so it will be evidently the interest of the Mexican, to support and aid those upon whom the success of the mines will depend. As to what advantage may accrue to the shareholder in London, it is of course, at present, not easy to say; but there is evidence enough of the great profits which these mines formerly made; those who know them best, speak of it with confidence; and if the chances which we have alluded to do not interfere injuriously to any formidable extent, we do not see why the result should not be a prosperous one. In a scientific point of view, much may be expected; mining establishments, of such magnitude, must necessarily include many men capable of making observations of varied character and research, and we hope that they will record and communicate them.

The interests of geology, mineralogy, and the other studies more immediately connected with the object in view, may not only be served, but, as it may be possible to include in the establishment, persons devoted to other branches of science, we may expect also good service to the cause of natural history, astronomy, and the arts.

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES, &c.

Jan. 15.—Messrs. J. H. Vivian, and Michael Farady, were respectively admitted Fellows of the Society, and the reading of Messrs. Herschel and South's "Observations on the Propositions and Distances of three hundred and eighty Double and Triple Fixed Stars," was resumed and concluded.

Jan. 22.—Dr. C. Scudamore was admitted a Fellow of the Society, and the following paper was read:—

"On a mode of preventing the corrosion of copper sheathing, by sea-water, in ships of war, and other ships." By Sir Humphrey Davy, Bart, P. R. S.

The attention of the president having been drawn to this subject by the Commissioners of the Navy Board, he instituted a series of experiments upon it, and has discovered a simple and effectual mode of remedying the evil.

Copper, when immersed in sea-water, however pure and malleable it may be, becomes covered with a coat of green submuriate, a sort of rust, which, when washed off, is succeeded by a similar one, and the process continues until the metal is completely destroyed.

It is evident, that no alteration which could be effected in the copper, would prevent its corrosion; the effect of different kinds of copper might be somewhat different, but the principal diversities must be owing to the variations in the saltness and temperature of sea-water.

Sir Humphrey was led to the discovery by the same principle which led him to that of the decomposition of the alkalies, namely, that chemical affinities might be balanced or destroyed by changing the electrical states of the substances; it thence appeared that the corrosion of the copper might be prevented by its being brought, by contacts with another metal, into a negatively electric state; and he had accordingly found that, by the contact of tin, forming part of an electrical circuit of two parts the surface of the copper, the desired effect was completely obtained. Other metals, positive in respect to copper, may be employed, as lead and zinc, but tin is preferable, on account of its capability of being brought into complete contact with the copper by means of solder, and also because its submuriate is easily detached from the metal.

The experiments were made with rib bands of tin, and it was found that such ribbands, equal in substance to only $\frac{1}{300}$th

part of the copper, effectually prevented the corrosion of the latter. They were so entirely satisfactory, that not the smallest doubt can be entertained of the perfect success of the method or practice, and the Lords Commissioners of the Admiralty have made arrangements for enabling the President to repeat them on the largest scale, on ships of war.

It is probable, Sir Humphrey observes, that this method, besides preventing ascidation, will also prevent the adherence of vegetable and marine animals to the sheathing.

This interesting communication terminated with some allusions to the great importance of the discovery it announced, in a national point of view, with respect to our maritime and commercial interests.

Hunterian Society. — The fifth annual meeting of the Hunterian Society was held at the Society's room, 18, Aldermanbury, on Wednesday, February 4th; when the following members were elected officers for the year ensuing.

President—William Babington, M.D, F.R.S.

Vice-Presidents—H. Lidderdale, M.D. Benjamin Travers, Esq. F.R.S. John Vetch, M.D. and Willian Compson, Esq.

Treasurer—B. Robinson, M.D.

Secretaries—J. T. Conquest, M.D. F.L.S. and Wm. Cooke, Esq.

Council—B. G. Babington, Esq. Thomas Bell, Esq. Thomas Callaway, Esq. W. D. Cordell, Esq. R. Dunglison, Esq. James Hamilton, M.D. John Hooper, Esq. J. C. Knight, Esq. Lewis Leese, Esq. J. Miles, Esq. J. Roberts, Esq. and J. H. Spry, Esq.

From the Report, it appeared that the number of the Society's members had increased within the year; and the balance in the treasurer's hands was about one hundred pounds.

Philosophical Transactions of the Royal Society of London, for 1823. *Part II.—Second part of the paper on the Nerves of the Orbit.*—By Charles Bell, Esq. Communicated by Sir Humphry Davy, Bart. P.R.S.

The following extract, from the concluding pages of this paper, gives the general results of Mr. Bell's investigation of the nerves of the head.

"I hope I have now unravelled the intricacy of the nerves of the head, and have correctly assigned to each nerve its proper office. In our books of Anatomy, the nerves are numbered according to the method of Willis, an arrangement which was made in ignorance of the distinct functions of the nerves, and merely in correspondence with the order of succession in which they appear on dissection.

"The first nerve is provided with a sensibility to effluvia, and is properly called olfactory nerve.

"The second is the optic nerve, and all impressions upon it excite only sensations of light.

"The third nerve goes to the muscles of the eye solely, and is a voluntary nerve, by which the eye is directed to objects.

"The fourth nerve performs the insensible traversing motions of the eyeball. It combines the motion of the eyeball and eyelids, and connects the eye with the respiratory system.

"The fifth is the universal nerve of sensation, to the head and face, to the skin, to the surfaces of the eye, the cavities of the nose, the mouth and tongue.*

"The sixth nerve is a muscular and voluntary nerve of the eye.

"The seventh is the auditory nerve, and the division of it, called *portio dura*, is the motor nerve of the face and eyelids, and the respiratory nerve, and that on which the expression of the face depends.

"The eighth, and the accessory nerve, are respiratory nerves.

"The ninth nerve is the motor of the tongue.

"The tenth is the first of the spinal nerves; it has a double root and a double office; it is both a muscular and a sensitive nerve.

"Had I taken the nerves of any other complex organ rather than of the eye, I should have had an easier task. If I had taken the nerves of the tongue, I should have been able to prove, by experiment, and in a manner the most direct, that the three nerves belong to three distinct functions, and stand related to three different classes of parts. I could have shewn that taste and sensibility belong to the office of the fifth nerve, voluntary motion to the ninth, and deglutition to the glossopharyngeal nerve of the tongue."

HUNTERIAN ORATION.

On Saturday, the 14th ult., the anniversary oration to commemorate

* "In this view of the fifth nerve, I have not touched upon its resemblance to the spinal nerves. But if we had ascended from the consideration of the spinal nerves to the nerves of the head, we should then have seen that the fifth was the spinal nerve of the head; that it had a ganglion at its root, a double origin, and from its power over the muscles of the jaws and mastication, that it was a double nerve in function, being that nerve which bestows sensibility, at the same time that it sends branches to the original muscles; that is to say, to that class of muscles which are common to animals in every gradation. In all these respects it resembles the spinal nerves."

the birth of that distinguished ornament of the profession, the late John Hunter, was delivered by Mr. Cline. The doors at the Royal College of Surgeons, Lincoln's Inn Fields, were thrown open at three o'clock. Upwards of three hundred gentlemen were present, among whom were several of the most eminent members of the profession, viz. Sir Astley Cooper, Bart., Mr. Abernethy, Sir H. Halford, Mr. Brodie, Mr. Travers, Mr. Green, Mr. Charles Bell, &c.; several Barristers, and other individuals of distinction, were also present, &c.

At four o'clock Mr. Cline entered the Theatre, and proceeded to address the audience to the following purpose:—

Gentlemen, —This anniversary oration was founded to commemorate the birth of John Hunter, a man whose superior mental powers have contributed more to elevate the profession of Surgery, than those of any other individual. Such, indeed, was the superiority of his talents, that he is justly entitled to be distinguished as a man of genius. This is a title that should be applied only to men of transcendant abilities, on whom mankind in general have agreed to confer it; such men, for instance, as Locke, Newton, or Harvey, of the superiority of whose powers there can be no dispute.

Genius, however, is a term which has been vaguely and generally used; and as there will be frequent occasion to introduce it in the course of this oration, it may seem proper that it should be defined. To explain it adequately might be difficult; but it fortunately happens, that one of the greatest geniuses which this or any other country has produced, has given a description of it. The description is, indeed, given in the figurative language of poetry, and on that account may not be so immediately obvious, as it might have been, if delivered in more simple and unadorned language. I will, however, take the liberty of reciting his words:—

"The Poet's eye, in a fine phrenzy rolling,
Glances from heaven to earth, from earth to heaven;
And as imagination bodies forth
The forms of things unseen, the Poet's eye
Turns them to shape, and gives to airy nothing
A local habitation, and a name."

This passage of Shakspeare is not more poetically beautiful, than philosophically just. It accurately describes the progress of thought in the mind of the man of genius during his most sublime conceptions; it delineates all the great qualities of mind which constitute genius—enthusiasm—expansion of thought—fertility of invention, combined with accuracy of judgment—the capacity of comparing, selecting, arranging, and combining those ideas, which, when embodied, form a work, that excites the admiration of mankind.

This description may appear to be better adapted to poetry, than to other arts or sciences; but, if it is properly considered, it will be found to be equally applicable to all; for the same powers of mind are equally required in painting, or sculpture, or architecture, as in poetry, and they who excel in any of these arts must possess the powers which constitute genius. This is not only true with respect to those arts which are called imitative, but it equally applies to the sciences, for in these the same powers of mind are exerted, though in a different direction. As an illustration of what I have just said, as to the same powers of mind being applicable to the arts of poetry and painting, I need only direct your attention to the picture behind me. (The orator pointed to the admirable portrait of John Hunter, by Sir Joshua Reynolds, which adorns

the wall of the theatre.) That picture presents to you an excellent representation of the man to whose memory this oration is chiefly devoted. Those who had the happiness of knowing him, cannot but be struck with the fidelity with which his features have been transferred to the canvass. He is represented as sitting in the easy attitude in which he usuully sat, when thinking, and the painter has not only accurately exhibited his features, but the expression of his eyes and countenance shews that he is thinking; the painting conveys to us the idea of a man absorbed in thought. The genius of the painter is particularly seen in the general expression of the countenance—in the elevation of the eyebrows, and the direction of the eyes, which the poet has so beautifully described as the attributes of genius. The artist who was capable of producing a picture like this, must have long and deeply studied human nature; he must have been well acquainted with its laws, or he would have been unable so completely to express the character of the man.

That Mr. HUNTER is entitled to the character of a man of genius, will be shewn by taking a short review of his life; the progress of his professional career will strongly mark how well he was entitled to the character so admirably described by SHAKESPEARE. JOHN HUNTER began to study his profession at a mature period of life, being twenty years of age when he commenced his studies, in the school of his brother, Dr. WILLIAM HUNTER, who excelled as a teacher of anatomy and physiology. He soon shewed in that school the superiority of his talents, and in a very short time excelled in dissecting and making anatomical preparations, in doing which he greatly assisted his brother Dr. WILLIAM HUNTER, in the formation of his Museum. In these employments, and also in assisting his brother in the task of anatomical tuition, he continued 10 years; during which period he was constantly engaged in procuring every animal within his reach, for the purpose of dissecting and comparing it with the human subject; and forming that vast collection of preparations in illustration of comparative anatomy, which is now in the Museum of the College. In making these preparations, he was at the same time prosecuting his inquiries into the animal economy, many parts of which, that were before very imperfectly understood, he clearly explained. Of the extent of his researches, an idea may be formed from the accumulation of specimens, amounting to more than seventeen thousand, which he left at his death, and which he had arranged according to a system peculiar to himself. He divided this vast collection into four classes, the first of which contained those specimens which were to explain the parts of animals immediately necessary to the preservation of life; the fluids and vessels, by which life is immediately supported.

The second class consists of all those organs which supply the waste of the body, by means of nourishment, in the investigation of which he explained the process of digestion in a far more satisfactory manner than it had ever been before explained.

In the third division he formed a large collection of specimens, illustrating a still more difficult part of the animal economy, namely, the nervous system; shewing the distribution of the nerves from the brain, the comparative arrangement of these parts in different animals, and by what means every part of the animal economy was connected one with the other, so that a general intelligence

was kept up throughout the whole. In this class he also introduced all the organs of sense, and the variety of these in different species of animals, by which a communication was kept up between the whole animal economy of nature. The last class illustrated the means by which every species of animals is reproduced, and was devoted to the organs of genération. The extent of his mind was not, however, confined to the animal economy; it embraced also the vegetable economy of nature, and in the investigation of this subject he made a great number of experiments, illustrating the vital power in vegetables, as well as in animals; for although there is so great a disproportion between the powers of different species of animals, and between those of animals and vegetables, yet, in some respects, they are uniform in all; that is, they have all certain powers by which life is supported, and by which the species is re-produced.

But, gentlemen, great as the work of forming this immense collection may appear to be—great as was that expansion of mind, which enabled him to explain the animal economy in so superior a manner, these labours were only preparatory to still greater exertions, which he had in contemplation for the advancement of his profession.

Having carefully watched for so great a length of time the functions of the animal economy, and being so thoroughly acquainted with the structure of the human body, he was enabled to distinguish, with a great degree of accuracy, every change which the body undergoes in a state of disease, which before his time was not at all understood.

Those who are acquainted with the ideas of surgery which prevailed before John Hunter instructed mankind, are aware how very crude and imperfect those views were with respect to all these circumstances.

After he had prosecuted his inquiries for a considerable length of time, having had the advantage of attending the hospitals in London, as well as of dissecting with his brother, he at length formed a course of lectures on the practice of surgery. It is to be observed, however, that he did not begin to deliver these until he was 47 years of age, so that he was 27 years employed in preparing the materials of the course. Extraordinary as it may appear, his professional reputation was so inconsiderable at this time, that although he issued advertisements to give a public course of lectures, the number of pupils who assembled at his first lecture did not amount to twenty. Of that number he who has now the honour of addressing you was one. I had the happiness of hearing the first course of lectures which he delivered. I had been at that time for some years in the profession, and was tolerably well acquainted with the opinions held by the surgeons then residing in the metropolis, who were most distinguished for their talents; but having heard Mr. Hunter's lectures on the subject of disease I found them so far superior to every thing I had conceived or heard before, that there seemed no comparison between the great mind of the man who delivered them, and all the individuals, whether ancient or modern, who had ever gone before him; for although the profession of surgery has been cultivated more than 2,000 years, this single individual has probably done more towards establishing Surgery, as a science, than all who preceded him.

He commenced this course of lectures by establishing the principle of the changes which take place in different parts of the body in consequence of violence, and afterwards

explaining the means by which such injuries may be repaired. This was the foundation of the treatise which was afterwards published on the blood, in inflammation, and gun-shot wounds; to which subject he particularly directed his attention, when he was engaged as a surgeon in the army at the siege of Belleisle, where a great number of wounded men, after a very severe action, were placed under his immediate care. Although this part of the course of lectures was digested at an early period of his professional life, he had not the confidence to bring it under the notice of the public, and though it was printed at the time of his sudden death, it had not yet appeared. Large and excellent as this work is, it is proper for me to observe, gentlemen, that it formed but a small part of the lectures which he delivered. There were other parts of the course, of the highest importance in a professional point of view, and the publication of which would have been extremely desirable.

The lectures which he delivered on morbid poisons, on scrofula, and on the diseases of the bones, deserved particular attention; the ideas of surgery which prevailed with respect to diseases of the bones, were so exceedingly imperfect, until he explained in what manner the morbid changes in those parts were produced, that all the knowledge of that subject preceding his time may be regarded as of little value.—By his accurate knowledge of all the functions of the animal economy, he was enabled clearly to explain all the changes which take place in these parts in a state of disease, and to lay down a rational foundation of cure. Such were the great discoveries and improvements in surgery made by this extraordinary man, that, since his opinions have been promulgated it may be truly said that no work can be published on the science of surgery, and no lecture can be delivered, without being greatly indebted to him, if the work be worth the trouble of of reading, or the lecture the time of attending.—He has laid the foundations of surgery in truth and nature, and his principles will last as long as nature herself exists; the truths are eternal.

The complete revolution produced in the minds of professional men by the discoveries which the great mind of Hunter was capable of effecting, affords one of the strongest proofs of his title to the character of a man of genius. The distinguishing characteristic of his mind was undoubtedly enthusiasm—it was the enthusiasm of genius which prompted him to apply his mind with so much ardour to the pursuits which led to these important discoveries. In these pursuits he was engaged early and late, to the last day of his life. He died at the age of 65; and those uninterrupted exertions were continued therefore during a period of 45 years. From an early hour in the morning, until midnight, or later, he was constantly employed either in dissecting, or writing, or reflecting on the various subjects to which his attention was directed. His ardent enthusiasm—his unbounded expansion of mind, are seen in his arrangement of the preparations illustrating the animal and vegetable economy—in the comprehensive view which he took of all living nature. His fertility of invention is demonstrated in his works, in which we find a great number and variety of ingenious experiments, which he contrived, in the course of his inquiries into the complicated actions of the living powers.

His investigations of comparative anatomy shew the great power which he possessed of selecting, arranging, and combining his materials, for the purpose of explaining the whole of

the animal economy of nature. Thus we find the exertion of his extraordinary powers of mind exactly corresponding with that which the poet describes as directing the operations of genius; for these effects are produced by the same powers which constitute poetical excellence, but directed to a different channel.

Genius, then, consists in that combination of powers, which is capable of producing effects which by common minds cannot be well conceived. But this term is often applied to men possessed of no such powers; that is, men who are only possessed of talent, are frequently described as possessing the gift of genius. But talent, gentlemen, is merely the power of expressing well that which another has conceived; it is the power of representing and explaining that which has been discovered by others. The man of genius shines by a light emanating from his own mind; but the man of talent shines by the reflection of the light which he has received from the man of genius; so that in comparing the minds of men with the formation of the universe, the man of genius may be considered as a fixed star from which light is constantly emanating, and the man of talent as a planet revolving around it, and receiving the light which is reflected from the fixed star of genius. The beneficent Author of Nature has thus justly distributed the powers of mankind in such proportions as are fitted to the wisdom of his purposes.

The operations of genius may be regarded as the light emanating from the fixed stars in the universe, which is more extensively diffused to mankind by the reflection of talent. The dissemination of good arising from this cause is not merely confined to arts and sciences; it may be seen also in the more extensive operations arising out of the institutions of government. Of this truth our own country affords a most striking example; for the greatness of this nation may justly be ascribed to the genius of one man. I allude to that extraordinary man, ALFRED the Great; it was he who first framed the English constitution; and from whom all the power, and all the greatness of this nation originated: to the great powers of his mind England is indebted for all its prosperity.

When ALFRED ascended the throne, this nation was in a most disorganised state. So severely, indeed, was that monarch harassed by an active, enterprising enemy, whose principal object was plunder; that he was driven from his throne, and under the necessity of seeking a retreat; but, to a mind like his, such adverse fortune served only to develope his extraordinary powers, and, during his retreat, he had time to form those plans which he at length so wisely and energetically executed, that he succeeded in expelling the enemies of his country, and re-conquering his throne. When he had thus established his power, his greatness of mind began to discover itself in the formation of a system of government; and hence emanated the English constitution.

Great minds always move on simple principles. It has been observed that they possess the power of unravelling what is difficult, and of reducing what is complicated to first principles. Accordingly, the genius of ALFRED, in the formation of a system of government, discovered that fundamental principle, which, though apparently simple, is the most powerful and energetic in its effects, which it is possible for the mind to conceive. This was the principle of governing all, by the energies of all —the principle which constitutes the foundation of the English con-

stitution. In the prosecution of this object, ALFRED fixed upon a firm basis the meetings of the Wittenagemote, where the laws were enacted. He distributed the administration of justice among the people, by one of the wisest, and most excellent institutions, that was ever conceived—the formation of juries. But, as the persons forming the juries, from want of education and other causes, were not always themselves competent to decide, he appointed Judges, to regulate the principles and practice of courts of justice. These institutions formed a mutual check upon each other; for ALFRED perceived, that if the power of deciding had been left to judges, such was the weakness of human nature, that corruption might have been expected to creep into the administration of justice; he therefore allotted to juries the power of pronouncing a decision, subject to a superintending power in the Judges to explain the laws, and regulate their practice. The limits of these powers were not, however, at first, so well understood or defined, but that Judges, in some instances, attempted to exceed them, by controlling the verdicts of juries.

When these instances of corruption were detected, ALFRED made severe examples, and several judges of that day were executed, with a view of deterring others from similar practices. This may be considered a harsh measure, but it was necessary, for the security of the lives and property of the subject.

It is the continuance of these institutions, and the principles of government acted upon by ALFRED, which have rendered the benefits of the English constitution superior to those of any other in the world. We find, however, in the history of this country, that frequent attempts have, at different times, been made to destroy these institutions. Thus the Norman conqueror endeavoured to eradicate the English constitution, but it was so strongly implanted in the hearts and affections of the people, that no power was capable of effecting its destruction; and so general a resistance was made to the attempt, that the Sovereign was under the necessity of desisting from his purpose.

A memorable instance of the same kind occurred in the reign of King JOHN, when a similar attempt met with such general resistance that the King was under the necessity of signing Magna Charta, to appease the indignation of the people. At a later period, the attempt which was made by one of the STUARTS, to establish despotism in the country, terminated in the expulsion of that misguided monarch from the throne.

The origin of all the blessings which this nation enjoys, may thus be traced to the fundamental principles of government, established by the great mind of ALFRED. The advantages which we have reaped from these invaluable institutions, for more than 900 years, are likely to be still farther extended, by the propagation of the same principles over a great part of the world; for we find the light of ALFRED making its way into the western hemisphere, and illumining ten millions of people, who have hitherto been kept in a state of darkness, under the thraldom of priestcraft and despotism; but who are now breaking their chains asunder, and proving, by the benefits in which the light of genius enables them to participate, that it is boundless, both in extent and duration. The character of ALFRED is, therefore, regarded by the British nation with veneration and gratitude; all historians agree in the tribute which is due to his extraordinary powers of mind; and his name has descended

to posterity, justly exalted above all Roman—above all Grecian fame.

Mr. Cline here alluded, in the most grateful, affectionate, and honourable terms to the late Dr. Baillie, of whom he gave his opinion, in a manner highly creditable to his feelings.

General and enthusiastic applause followed the conclusion of this luminous oration; which cannot fail to be read with interest by every class of society.

Apothecaries' Charges.

Many of the more voluminous writers in this department have paid attention to the fees and charges which medical Practitioners are entitled to for their attendance on the sick; and this we hold to belong strictly to that branch of Politieal Medicine termed Jurisprudenee. In Great Britain, a pure Practitioner of physic, and (we presume) of surgery, cannot recover at law any remuneration for his professional labours—the *fee* is entirely an honorary affair—an *understood*, and not expressed, matter, upon whieh no aetion can be raised. The only remedy of this nature is in the power of that Praetitioner who, along with his advice, attendanee, and other assistance, furnishes the commercial part of the transaction—the drugs or implements that are *bona fide* matters of eonsumption or use. For the cost of these an aetion may lie; and the only way in which such articles ean be rendered sourees of lucrative gain, is by charging such as are required at several hundred per cent above their market price, or by dispensing several hundred times more of them, or of something else, than is required—or by both.

Many aetions are brought on this ground to recover payment for medicines; and rarely does an instanee of scuh a nature oceur without calling forth animadversions, and exciting ridicule as to the quantum of medicinal preparations in the first instanee, and the price forming a bill proverbial as to length. This system of praetice, or rather of traffic, which is ehiefly confined to the Surgeon-Apotheearies of London, is a great abuse of the noble art of healing, and little better than an imposition on the publie. We wish well to the body of general Praetitioners, for we believe them to be a highly meritorious order; but we also wish we could see them requited for their important labours in some other way, and doubt whether it be not in their own power to effect this. Were a reform attained in this respect, we should not every now and then meet with cases like the following.

Case of Cole *v.* Devereux,—Court of King's Bench, Thursday, February 19.—This was an aetion to recover payment for attending the defendant during a long illness; in the course of which the plaintiff had supplied the medicines. The first witness, a Surgeon, who had served an apprenticeship to plaintiff, stated the eharges to have been reasonable, and the treatment proper; and, on being cross-examined, stated, among other items, that boxes of pills of various descriptions had been charged 3s. 6d. each, the original cost of the materials being perhaps 6d. Other witnesses considered the charges reasonable; among whom was Mr. Bampfield, of Bedford-street, whose house had been kept by Apotheearies for the last century; and, on reverting to accounts as far back as 1758, and comparing them with Mr. Cole's account, he saw no great differenee between them. The custom of making presents to Apotheearies, in addition to their bills, he was sorry to say, had ceased.

The counsel for the defendant considered that his client had been

charged exorbitantly, and that all the witnesses who had spoken to the reasonableness of the bill were interested in making it out to be so, because they were all Apothecaries or Surgeons, who justified their own charges when they sustained these. He animadverted upon the fact, that two boxes of pills were frequently charged twice in the same day, which it was impossible the defendant could have swallowed.

The judge, in directing the jury, remarked, that if the defendant had not intended to pay the plaintiff according to the usual system of the profession, he should have called for his account at an earlier period.

The jury found a verdict for the plaintiff, and awarded him about two-thirds of the sum sought to be recovered.

We hope the day will arrive when, in large towns at least, the practice of the medical art and the traffic in medicine will not be carried on by the same individual. Subordinate Physicians, perhaps, there must be, —and the general Practitioners, or Apothecaries of the metropolis, are, in fact, such at present; but we do not consider that any advantage must, or does actually accrue, either to the Profession or to the sick, by the modification of medical economy now in use. We know that the fault is not altogether chargeable to the practising Apothecaries; but we have little hesitation in asserting, that it is competent for them to place themselves upon a purer professional footing whenever they choose. Were this done, we should no longer hear of such actions as the above, in which those who have to manage the case under the eye of the public will never be very solicitous to distinguish between that part of the Practitioner's character which is professional, and that which constitutes him the tradesman.

Medical Evidence.—An action was brought in the Palace Court lately, which supplies us with an instance of speaking unadvisedly, on the part of a professional witness. The magnitude and importance of the issue have nothing to do with the principle. This is the same, in whatever court, or on whatever occasion, a medical man may be called upon for an opinion. A Surgeon had reduced a dislocation of a child's elbow, for which the father resisted payment, on the ground that the injury was merely a sprain, and that the charge was excessive. To recover his fee, the Practitioner brought this action. The ordinary medical attendant of the defendant's family saw the arm on the following day, *accidentally*, and, in his opinion, there was no dislocation. By this, as we understand it, the witness did not mean to confine his opinion to the time at which he saw the arm—for if so his evidence would have supported the plaintiff—but to establish that no dislocation had previously existed.

Sir W. Blizard, who had already spoken in favour of the plaintiff's character and professional qualifications, was again examined upon this point, and very properly discountenanced such an inference—stating that it was impossible for any one, after twenty-four hours, to say whether a dislocation had taken place or not, if it had been properly treated. —*Med. Repos.*

THE ECCENTRIC SURGEON.

Maurice Quill, Esq. (whose death was announced in the *Dublin Morning Post*, on the fifteenth of August, in the new barracks, Cork,) was a native of Tralee, the capital of "the kingdom of Kerry," as it is called in Ireland. He was appointed Assistant-Surgeon of the 31st regiment of foot, about the year 1809, and followed that regiment to the Peninsula.

Subsequent to his landing, he contrived to remain for many months at Baylem, in Portugal; but after much manœuvring, to avoid "joining" at head-quarters, Maurice was "ordered up" peremptorily by the Duke of Wellington. His reputation for wit, originality, and consequently for "idling," all who came within the sphere of his influence was such, that the morning after he had "joined," his Colonel, (the gallant Duckworth) waited upon Lord Hill (of whose division of the army the 31st formed a part), and with unaffected regret and gravity reported the arrival of Maurice, and the consequent termination of discipline in the regiment. The General uttered the most dreadful denunciations against "Mr. Maurice," as he called him, should the fears of the Colonel be realised—but he became ultimately extremely partial to the droll, eccentric Maurice.

Quill was one of the finest specimens of Irish character that has appeared in our day. He possessed, in an extraordinary degree, all the wit, humour, and love of *badinage* that distinguish his countrymen. To the originality of his conceptions, the oddness of his remarks, and the strangeness of his phraseology, the richness of his brogue gave peculiar poignancy. He loved ease, good living, and society; of the latter he was always certain, if, indeed, he happened not to be in a desert; for so attractive was he, that his quarters were the rendezvous of all the officers who could, by possibility, repair to them, to "beguile the tedium of the winter's night;" unless such as were, unfortunately, from their rank, denied that pleasure, in observance of military etiquette. The rush-light in his tent, or lodging, was a beacon to the exhausted and dispirited soldier. I have said that he loved *badinage*, and was witty; but his wit was never barbed by the slightest touch of ill-nature or offensive personality. He was brave, but affected cowardice; and gave such whimsical expression to his assumed fears, as provoked laughter in the hottest engagement. Of this, his conduct at the dreadful and bloody battle of Albuera will be a sufficient example.

Quill had unnecessarily followed the regiment "into fire," as it is termed; creeping on his hands and knees, with boyish tricks, he traversed the rear of the line, pulling the officers by their coats, and tendering his brandy bottle, saying, "Here, take a *slug** before you get a *bullet*. Have a *deoch and hurras* (a drink at the door) *before you depart.*" A mass of the enemy's cavalry, including a regiment of Polish lancers, prepared to charge the 31st. Colonel Duckworth ordered the regiment to form in square, in the centre of which he discovered Maurice, shaking from head to foot with well-dissembled terror. "This is no place for you, Mr. Maurice," said the lamented Duckworth, a few moments before his fall.—"By J——, I was just thinking so, Colonel," replied the *droll;* "I wish to the Holy Father that the greatest rascal in Ireland was kicking me this moment up Dame Street, and that even though every friend I have in the world was looking at him! Finding it impossible to break the square, the enemy's cavalry retired with great loss, when, ordering the regiment to deploy, "Fall *in*," said the colonel; "Fall *out*," said Maurice, and scampered off; but hearing that a captain of the regiment was severely wounded, he returned into fire, and dressed him. He had just finished this operation, when a twelve-pound shot struck the ground near Maurice and his patient, and covered them with earth. "By

* Slug, *Anglice* a dram.

J———, there is more where that came from," said Quill, and again took to his heels.

Of the nature of his replies to the many questions with which he was assailed by his colonel, who was induced to ask them, by the suggestions of those better acquainted with his manner—and to give a striking specimen of Quill's character, I shall add one more instance :—" I am desirous to know, Mr. Maurice," said the colonel, " to what good fortune we can ascribe your appointment to the thirty-first ?"—" Why, colonel," (with affected embarrassment) " I left the ——— because some of the spoons belonging to the mess were found in my kit, and you know that would not do in one of the crack regiments, colonel. I joined the *thirty-first* because I had a brother in the *thirty-second*, and I wanted to be *near* him."

Of his professional abilities, I know nothing: that they were not held in high estimation would appear from the fact of his not having been promoted during the Peninsular war. That he despaired of advancement after the war had terminated, was obvious, from his reply to a friend who asked him what rank he held— " Why, I have been thirteen years an Assistant-Surgeon, and, with the blessing of God—that is, if I live and *behave* myself, I shall be so for thirteen years more." I am pleased to observe, that this prophecy was not verified, and that he had been promoted to the rank of full surgeon before his death. Mr. Quill died young—he must have been under forty years of age. Of poor Maurice, it might be truly said, that he possessed—

Spirits o'erflowing—wit that did ne'er offend—
He gained no enemy, and he lost no friend.

The tear of many a veteran will fall when he shall learn that Maurice Quill is no more.

HOSPITAL REPORTS.

St. Thomas's, Monday, March 8th.—In the middle of this evening's lecture (on lithotomy) Sir Astley Cooper called the attention of the Students to the circumstance of his lectures being garbled every week by a certain " blushless" publication. Sir Astley, after offering a few observations, said that he did not care much for his lectures being published; but that at which he felt most reluctant, was his name being hawked about the streets on boards, and stuck into every corner of the daily press. He further remarked on the injury attendant on publishing Surgical lectures; which never could be intended for the extra-professional eye. " How is it possible for me, or any other placed in my situation," observed Sir A., " to elucidate the practice of surgery without giving the unsuccessful cases, as well as those which have terminated favourably, if the former are to be blazoned forth to the world in every paltry periodical. Surgery must suffer materially from such illiberal attacks. The man himself can neither be a surgeon nor a gentleman, who, forgetful of the duty he owes to the profession, and to the world at large, violates the sacred obligations dependent on him as a gentleman and a member of that profession."

With respect to the lectures, Sir A. remarked, that those published weekly were very imperfect notes of them; and that, in fact, they were calculated to mislead the pupil, as well as the practitioner who did not know better—and much indeed he was afraid, that there were too many of the gentlemen who trusted to the report of these lectures in preference to attending to them themselves.

Sir Astley further observed, that he had not intended to have mentioned this subject, but learning that some discussion had occurred in the theatre at the close of Mr. Green's two last lectures on the eye, a few evenings ago, he wished it to be understood, that he did not value the publication of the lectures at all; they carried their bane without their antidote with them; but he could not tacitly and supinely look upon a violation of professional honour, without avowing his opinion openly and candidly against such unprincipled profligacy. But there are men whom no sense of honour can stimulate, and whom no dereliction of duty can intimidate, &c.

Sir A. next adverted to the publication of cases in the course of the hospital practice; which, from the uncharitable and perverted manner some of them had gone forth to the world, he should, in conjunction with the other gentlemen of this establishment, conceive it to be no less than his duty to consult upon some measures

for the suppression of this flagrant evil, &c. should it be continued.

Sir A. (taking a paper out of his pocket) now stated his only objections to having his lectures published—among which, he remarked that his colloquial style, in the lecture-room, was not what he could wish to go forth, as it was not intended, to the public. And that, as he had studied his profession while young, with the most rigid application—and, as his whole life had been devoted to it, he should now, in his old age, in the enjoyment of excellent health, and in the bosom of independence, devote the remainder of his days to those who might live after him; he was, therefore, he observed, determined to do that for himself, which no one could do for him; viz. he was going TO PUBLISH HIS OWN LECTURES. *(Load cheers and applause, which continued for several minutes.)*

We shall return to this subject next month; and, in the mean time, we here beg leave to observe again, and once for all, that our columns will always be open, as well as ready, to defend the profession from aggressors and agressions of every description.

Patent accelerating Improvement in Naval Architecture, combining safety with a greater degree of Velocity. By MONCRIEFE WILLOUGHBY, Esq.—The object of this invention, or rather of this nautical improvement, is to accelerate the velocity of floating vessels; by enabling them to use, or carry a greater area of sail, without exposing them to an increased liability of overturning; and that they also shall be empowered to sail occasionally over places of less depth, than what is practicable by the present mode of naval architecture. The advantages of a deep keel in the former case, and to prevent a vessel being driven to leeward, when upon a wind, are well known; but a great depth of keel produces an inconvenience, which may more than compensate for these advantages; because, it renders a greater depth of water necessary, and thereby prevents her from navigating shallow passages.

To obtain partially the advantages of a deep keel, and to allow a vessel to navigate in shallow water when required, keels have been made adjustable or moveable, and have been called *sliding keels;* these have been constructed in several ways, but all with an effect similar in principle.

The manner in which a deep keel operates, to preserve the perpendicular position of a vessel, is in the resistance which it meets, in moving sideways through the water; and thus opposes any sudden motion, that might be communicated to the vessel by a side force; but, if a side force should once have been sufficient to destroy the upright position of a veseel, the keel then becomes, in the same manner, an impediment, to prevent the restoration of the right position; and this is an imperfection which may have retarded the more general adoption of sliding keels. From these observations, it must be evident, that the less the depth of keel, so much the more advantageous, provided it be sufficient to answer the beneficial purposes intended; this invention, therefore, gives greater intensity of effect to *sliding keels;* whereby, floating vessels will be enabled to preserve their true position, with less depth of keel, than has hitherto been accomplished.

All sailing vessels contain a certain quantity of heavy material called ballast; which, being deposited in the lowest parts of the structure, contributes to preserve their right position; and, it is known, that the lower the ballast is placed, the greater power it has in producing the effect required; the improvements of this patent consequently consist in *converting this ballast, as a ponderous metallic substance, into a shifting keel; moving up or down according to circumstances, by suspenders, in perpendicular grooves, right through the centre of the hull of a flat-bottomed vessel; which must naturally produce four very important advantages.*

1st, When lowered down, by acting upon the principles of a lever, a less quantity of ballast, perhaps one-third, or even one-quarter of the usual quantity would be sufficient, to keep a vessel at all times in an erect position, and her hull thus being *less* sunk in the water, there must of course be *less* resistance to her motion through it.

2, When her ballast keel is lowered down, acting still upon the principles of a lever, a vessel may be enabled to carry two, or three times the usual quantity of canvas; hence, as above pointed out, she will not only have less resistance to overcome, but she will, at the same time, obtain a greater impulse to move forward, her velocity being by these means accelerated in a two-fold degree.

3d, When the ballast-keel is drawn up close to the hull, the vessel being constructed (as above stated) with a flat bottom (and in this manner drawing little water), will be enabled to pass over most shoals and bars at the mouths of rivers, and to ascend these at their lowest ebb, should they afford water for the least navigation.

4th, By a vessel having no ballast within her hull, she will be enabled to carry a greater cargo; which being combined with quicker passages, will be, in many cases, a benefit of the very first importance, particularly for perishable articles, such as fruits, &c. &c.

Certain vessels, constructed on Mr. Willoughby's principle, might be attended with even more important advantages than are here pointed out. Let us hope that we shall shortly see them brought to that state of perfection to which they are capable, from the well-known talent and mechanical ingenuity of the author. Our limits, at present, prevent us from entering farther on the subject.

JOHNSON *versus* REECE.—The erudite, though often verbose, editor of the "QUARTERLY REVIEW," has at length been unable to command his taciturnity any longer against the *vituperative* inuendoes of his relentless assailant. Dr. Reece, it would appear, in aggravation of his incessant *hostilities* against Dr. Johnson, has given it out in his GAZETTE of HEALTH, that "in consequence of the death of Dr. J. Johnson of the Albany, a pretty generally idea prevailed, and even yet prevails, that the editor of this journal (Med. Chir. Rev.) had gone to the shades." As an episode to this delusion, it was last month gazetted by the 'Southcote sage' (meaning Dr. Reece) "that Dr. J. Johnson had gone to Paris for surgical assistance, and was therefore only the *nominal* editor of this Review!"

Dr. J. however retorts these assertions, that his journey to Paris for surgical assistance was, in reality, a tour of about 2,500 miles through France, Switzerland, Germany, and Belgium, in the months of August, September, and October last—"during which tour Dr. Johnson *never* took a dose of physic, and *never* enjoyed *robuster* health or higher spirits (and he might have added, or *travelled* faster) in the whole course of his life."

Whatever may have been the origin of the quarrel between the two Doctors, for "Doctors do not always agree," is not our province to determine. We think, however, that Doctor Johnson has improved by his late tour through "FRANCE, SWITZERLAND, GERMANY, and BELGIUM;" and the following specimen, from the editor of the Review himself, will doubtless qualify the assertion.

"It has frequently been asked, how it happened that Dr. Johnson was honoured with such an unusual proportion of vituperation in the "Gazette of Health"—or, more properly speaking, the "GAZETTE OF FILTH," conducted by the renowned Escula-

pius of the Egyptian Hall—Richard Reece, M. D. (which signifies dealer in medicine chests) of the University of London; physician-accoucheur to her late holiness, Joanna Southcote, &c. There are reasons for all things—and for this there happens to be no less than *ninety* very weighty ones. About ten or eleven years ago, the Piccadilly M. D. or drug-dealer, conceived the benevolent project of extending the benefits of his *disinterested* advice to our Indian possessions; (instead of confining them to the Medical Hall and Bolton Row) and with that view published, by the aid of a *Gazetteer*, or rather GARRETTEER, a work entitled—"The Medical Guide for tropical Climates,"* in which, with laudable zeal, were well puffed-off the medicine chests, rhatany root, "*Preventive soap*" buchu leaves, &c. &c. to be found in genuine perfection *only* at the Medical Hall, Piccadilly. Who would have thought there was any harm in this?—especially when the work was dedicated "BY PERMISSION," to Dr. William Dick, principal Physician to the East-India Company—and not only *by permission* for the dedication, but as was pointedly avowed, with the *entire approbation of the work itself*, by that distinguished Physician? In the face of all this, a review appeared in one of the medical journals some time afterwards, pourtraying so felicitously the matchless absurdity, quackery, and ignorance of the publication, that it fell still-born from the press, amidst a burst of ridicule. Dr. William Dick, the patron and approver of the work, immediately came forward, and affirmed that, not only did he never lend his name to such a wretched production, but instead of *approving it*, he *never saw or heard of it*, till the just critique of it appeared in the journal—thus affixing an indelible stain on the moral character of an author who could deliberately publish a falsehood in the title-page, and another falsehood in the preface of his book, and both for the purpose of puffing-off his merchandize!!†

"Our readers may form some idea of the paroxysm of rage produced by the public detection of unparalleled effrontery and falsehood. There was no resource but a prosecution, by *indictment*, of the editors and publishers of the critique. A bill was accordingly filed, and great preparations were made; but lo! when the day of trial came, the heart of the "Southcote sage" failed, and, rather than let the transaction come into court, he pocketed the loss of his character for veracity—the edition of his Tropical Guide, and *ninety* guineas law expences! A pill so bitter to swallow and hard to digest, has, ever since that period, occasioned a monthly effusion of gall against Dr. Johnson, the supposed writer of the critique. Considering the nature and extent of the offence, Dr. J. does not wonder at, nor complain of the continued and unextinguished ire of the "Southcote sage." He has inflicted on that worthy personage a wound, the smarting of which can never cease on this side the grave, and consequently his share of vituperative merit, in common justice, be greater than that of all others put together: His friends have now a key to the GAZETTE OF FILTH—and can explain to the "clergy and heads of families," in the country, the secret springs which actuate that *disinterested* publication. We are thoroughly convinced that, in every instance where its reptile editor has squirted his filth on the members of the profession, from the College of Physicians down to the sage's own fraternity of quacks, the same base and dastardly personal motives were at the bottom of the transaction, could they be brought to light. In our next number we promise our readers a hearty laugh at the portraiture (drawn faithfully from the writings and actions of the "Southcote sage,") which this disgrace to the very dregs of medical society presents of absurdity, impudence, baseness, and mendacity."

Whatever may be the sentiments of Dr. Johnson himself with respect to his antagonist, Dr. Reece, we are unwilling to believe, that the above effusion ever directly emanated from his pen—it savours more of the appearance of the ravings of an ordinary journeyman defending, or rather doing that species of dirty work which his employer, to what extent soever he may think proper to sanction it, could not himself descend to perform. We had much rather, at all events, have seen Dr. J. throwing off a squib occasionally, if he imagined the sarcasms thrown out against him worthy of his notice, or, if they at all militated with his peace of mind; just as the stimu-

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* It is but fair here to observe, that Dr. Johnson has also published a work on the diseases of tropical climates.

† DOCTOR DICK's letter—Gentlemen.—You have severely censured me for approving a book entitled, "The Medical Guide for Tropical Climates." By Richard Reece, M. D., and I must acknowledge, that you could not condemn me too much.

lus was felt, than to see him now, after a three months' tour, returning no doubt flush with the juice of the French grape, and bouncing with Dutch courage, piping-hot from Belgium, sweeping together all the scraps of his fury, and, so unexpectedly, "dabbing them all at once slap-bang" in the face of his antagonist, with whom he had so long pleaded mute—in fact, during no less a time than after a lapse of eleven years!! Let us hope the Doctor will not turn the promised laugh upon himself by trusting to his amanuensis what, if he feel enraged, can only be effectually, if at all, done by himself.

DOCTOR JOHNSON, VERSUS MR. WAKELY; and "Dr. Collyer's *Morbid* Parts"

Dr. Johnson is the last man in the world we should have supposed capable of laying his hands on anything that did not belong to himself; although his early propensity to chime in with his "*Young Friend*" the "LANCET," might well have justified another opinion.

In the preceding number of the Review, Dr. Johnson was kind enough to introduce the "Lancet" into the world, under the appellation of his young friend; and, as foretold by our predecessors, in the old series of this work,* his worthy protegee, for this mark of favour, has been teazing his charitable patron, who, by the bye, has become mighty irascible all at once, ever since, and for no other purpose than to elicit a repetition and a continuance of these acts of kindness, in any shape, to a periodical in its leading-strings. And so it happens—the Lancet, a paltry, disgusting weekly production, has succeeded in dragging the editor of the mighty Medico-chirurgical Quarterly Review into open and avowed hostilities, for the purpose of bringing itself into the wished-for notoriety, which no other channel could so effectually have done. Yes! Mister Wakely has now grappled with the Doctor, and hitherto (notwithstanding the nausea excited when we reflect on the "Morbid" origin of the Lancet) we are compelled to say, maintains the vantage ground by setting the Doctor *on fire* and *stabbing* him at all points.

With respect to publishing without *authority* or *consent*, the transactions of public schools and institutions, we cannot entirely agree with the editor of the Review, in the veto he would pronounce against it; we are more inclined to view this subject, coming from the quarter it does, at this time of the day, as tinctured with some portion of envy rather than as an impartial condemnation of what might appear to be incompatible with honour and integrity, neither of which, we have yet to learn, are at stake, as regards the publication of Sir A. Cooper's public lectures, or the occurrences of the large institution itself, (to which he is attached) the result of the most genuine, and extensive philanthropy and benevolence, that ever characterized any individual in any country on the face of the habitable globe: and sorry indeed should we be, to find, or what is more, to suspect, that any of the eminent gentlemen connected with these (Guy's and St. Thomas's) or any other of our public hospitals, were so contracted in their views as to prohibit a manly and candid publication of their practice, or even of their lectures. This is not the point at which Dr. Johnson should have pricked the *venomless lancet*: he should have begun by exposing the disgusting slanderous origin of the publication itself; a publication, in fact, on which no man possessing the least delicacy of sentiment, or innate moral feeling, can look, but must

* No. 45. p. 344.

shudder with horror, and eye with indignation, the man, if he deserves the name, whoever he may be, that could have raked and blown up the dying embers of a foul story, for the purpose of bringing himself into a mongrel notoriety. Piper, Povey, &. Co. with the morbid re-modelled story of the baths, must ever be too strongly identified with the Lancet, to lose sight of its chaste and unassuming Editor.—Had Dr. Johnson for a moment recollected this circumstance, he would not, nay, could not have forgotten himself so far as he has done—he would not have presumed to dictate to a callous, a remorseless feeling; nor would he have affected either surprise or remonstration, at any of the productions of such a heartless scribe.—But that the Doctor should have suffered himself to be entangled in the web of abuse poured out against him, is to us most unaccountable; for, surely the Editor of the Review has not been such a very short time connected with the periodical press, as to plead ignorance of its trammels and its wiles.

In the next place, the Review, instead of devoting so much time and space to a long tirade of insipid retaliation, should have adverted to the incorrectness of those very lectures, against the publication of which he so warmly declaims—he should have cautioned the pupils of the different hospitals, and the profession generally, against taking all for granted that *Mister* Wakely chooses to set down as surgical lectures; for, we can undertake to aver, that scarcely a column of the calumnious vehicle, *professing* to give, *verbatim*, the lectures as delivered by Sir A. Cooper, but which is, from the commencement, replete with surgical error and literary inaccuracy. Besides, ought not the tyro, who should depend solely upon his own notes and his own ear, to be apprised of the danger and waste of time to which he exposes himself, by trusting to the garbled notes of a sneaking hireling,* &c.? who has not courage enough, although boisterously, re-

* The clamour raised by the pupils, after Sir A. Coopers' surgical lectures on Monday and Wednesday last, (March 1st and 3d) against the *Lancet*, for its licentiousness, could only be equalled by an O. P. row—the confusion was similar to that excited by a house on fire, where the inmates did not *smoke* the flame. It seems the Editor of the LANCET, Mr. Wakely, has arrogated to himself the magisterial and presumptive authority of reprimanding the gentlemen attending the lectures, in his weekly vehicle, for the little innocent and well meant recreation they sometimes indulge in, previous to the appearance of the professor. The gentlemen, in more than one occasion, have publicly expressed their sense of feeling in a proper and becoming manner, although nothing determinate has yet been decided on, for these unwarrantable insults, and hitherto novel species of effrontery, as well as for continuing weekly to *jargonize* the lectures of this institution in particular. The fact is, Mr. W., obnoxious in more than one point of view, on various occasions, has distributed bills to the gentlemen, as they enter the lecture room, puffing off his Lancet. These, as a matter of course, without much attention to the contents, were exchanged in the form of paper bullets from one side of the Theatre to the other; many of which, chanced to alight on the ex-sanguineous *Physiog.* of Mr. W., who felt no little *chagrin* at the indignity offered to his Editorship; and, as was not expected, gave vent to his feeling in a flood of invective and scurrility in his next number, instead of taking it in good part, as he ought to have done. Latterly, the same *gentleman*, with his usual rancour, has attacked an old man with one arm, formerly a patient in St. Thomas', where he underwent amputation, and who has since been permitted, as a medium of existence, to sell oranges, &c. to the pupils entering the lecture or dissecting room, for the very same reason; viz. that occasionally, though very seldom, as he continues to stow himself away in some snug corner, where those who know him cannot distinctly point him out, a piece of orange-peel finds its way where his own hand-bills with elective force found out their master. This, the Editor of the Lancet chooses, in consequence, to call "selling fruit in the wards of the hospital."—"Admirable Critic!"

peatedly, and what is more, most opprobriously and insultingly called for, in a public theatre, to step forward and justify his conduct, if he can do such a thing, either upon principle or precedent. We certainly commend that *esprit de corps* which prevails, we trust generally, throughout the London hospitals, that sets its face against the tag-rag and bob-tail species of the profession, who get in among them like wolves in sheeps' clothing; and we could have commended Dr. Johnson, whose talents and abilities no one will presume to doubt, had he done as he could have done, and in a more masterly style than ourselves, that which unstifled arrogance and inflated presumption have reluctantly imposed upon us, instead of dogmatizing, in the spiritless strain in which he has indulged; in fact, advertising a periodical lampoon, because a buffoon has been playing off his tricks upon him. So much for precious friendship—" a young friend," a friend now declared

" Fit for treasons, stratagems, and spoils."

MELANGE.

On the Use of the Sulphate of Kina in Intermittent Fever. (Giornale Arcadico di Scienze, &c. Novembre, 1822. xlvii. 129.)—The following statement by de Rossi of Anani, and Tonelli, a physician at Paliano, is derived from the most precise and extensive experiments yet published on this subject. Both of them have made up a set of admirable tables, from which we have deduced the subsequent particulars. De Ross used the sulphate of kina in 64 cases, namely in 8 simple tertians, 29 double tertians, 2 simple quartans, 17 sub-continued, and 8 pernicious intermittents. *All of these were cured; 50 had no subsequent paroxysm, 7 had only one very slight fit, 5 two similar fits, 1 several fits, and 1 passed into a continued remittent fever.* One person affected with a quartan for twelve months, recovered after a single slight return of the paroxysm. The quantity of the salt used varied between 12 and 72 grains; and in 45 cases did not exceed 24. The remedy was given in pills, and always in the apyretic intervals, in doses of 4 grains every hour, or every alternate hour; and, in general, to confirm the cure, 4 grains were given daily for ten days after the last paroxysm. The principal advantages to be derived from it, in preference to the bark itself, are the following:— It may easily be given to children, and to those who have a disgust at bark, or are affected by it idiosyncratically; and it has a rapidity of effect, especially in pernicious and sub-continued intermittents, far surpassing that of the bark. He farther proves, that large doses produce no bad consequences; in other words, that it can never act poisonously; that it may be given safely to persons of all ages and temperaments, to puerperal, pregnant, and menstruating females; and that, when it fails, the failure is owing either to the existence of some other morbid cause, or to the sulphuric acid being present in excess, or to the salt being decomposed by pharmaceutic substances intermingled, or by other matters which it encounters in the alimentary canal. The observations of Tonelli are equally pointed. He used it in 65 cases, namely in 4 quotidians, 22 simple tertians, 31 double tertians, 3 simple quartans, 2 double quartans, 2 sub-continued, and 1 pernicious intermittent. All of them recovered, except the last, who would not take the remedy till he was insensible, and near the point of death. Forty-two recovered without any return of the fit; of the 65 cases only 43 required a repetition of the first dose, which varied from 12 to 18 grains.

These results, especially those of De Rossi, who used the salt in greater quantity than Tonelli, and in a greater number of bad intractable cases, place the superiority of the sulphate of Kina beyond all doubt, both as to convenience and efficacy.

Analysis of Maize.—(Annali Universali di Medicina. Dicemb. 1822. xxiv.) The following analysis of Virginian maize, was executed by Dr. Gorham of Cambridge, in the United States.

Water	9.0
Feculę	77.0
Zeina	3.0
Albumen	2.5
Gummy matter	1.75
Saccharine matter	1.45
Extractive	0.8
Epidermis and lignin ...	3.0
Phosph. carb. & sulph. lime	1.5
	100.

The substance which the analyst has denominated Zeina, is most easily procured by digesting a few ounces of maize-flour for some hours in warm alcohol contained in a phial, and then filtering the solution immediately, and distilling off the alcohol. When so prepared it is yellow, and resembles wax in appearance; it is soft, ductile, tenacious, elastic, without taste or smell, and heavier than water. It smells, and burns when heated, emitting the odour of animal matter in combustion; but yields no ammonia. It is insoluble in water or the fixed oils, but soluble in alcohol, in oil of turpentine, in sulphuric ether, and partly also in the principal acids and alkalis. It is not decomposed by the action of the atmosphere; for the discoverer kept some of it six weeks unaltered. It resembles gluten more than any other vegetable principle, but differs from it by its solubility in alcohol and ether, and by containing no azote.

Existence of Iodine in the Mineral Waters of Sales.—(Anales de Chimie et de Physiqùe, Aout 1823. xxiii. 419.) —The waters of Sales, in the province of Voghera, in Piedmont, rise from an argilo-calcareous soil, and collect in a basin six feet in diameter, and nineteen or twenty-one inches deep. Their temperature is that of the air; their specific gravity 1.0502. They are muddy, and have a slight yellow tint. The smell is strong, resembling that of urine acted on by muriatic acid, their taste sharp and brackish. Bubbles of elastic fluid are constantly escaping from the bottom of the basin. In 1788, Volta discovered muriate of soda in this water; and in 1820, an Italian of the name of Romana, likewise detected several earthy muriates, and a little oxide of iron. Very recently, an apothecary at Voghera, S. Angelini, discovered the existence of iodine in it, by casually observing that Fęcula struck a blue colour with it. He even succeeded in extracting from it a notable quantity of iodine, by the process used for preparing that substance from saltpetre-makers' ley. "It is a singular fact, that for a long time the waters of Sales have been successfully used in the treatment of scrofulous disorders, and especially of goitre."

Application of Galvanism to the Extraction of Urinary Calculi. (Annales de Chimie et de Physique, Juin 1823. xxiii. 202.)—MM. Prevost and Dumas, the Genevese physiologists, whose ingenious researches on the blood and on urea, we noticed in our last Number, have just published the outline of some experiments they have made, to prove, that the extraction of urinary calculi from the bladder may be facilitated by means of galvanism. They found that when a fusible calculus (ammoniaco-magnesian phosphate) was placed be-

tween the extremities of the conductors of a trough containing 120 plates, and was plunged in this state under water, the basis and the acid were gradually transported to the opposite conductors, and there combined anew in the form of a fine powdery precipitate. The process having been continued upwards of 16 hours, a calculus which weighed originally 92 grains became so friable, that the slightest touch broke it down into small crystalline grains, none of them larger than a lentil. They next proved to their satisfaction, that a pair of conductors, protected by some non-conducting substance to within a few lines from their extremities, might be introduced into the bladder of a dog, and connected with a trough of one hundred and thirty-five plates, without occasioning any uneasiness to the animal; although the same apparatus immersed in water decomposed it so rapidly as to furnish a *torrent* of gases. Having thus found that no harm could result from disengaging the galvanic fluid in the bladder, they finally proceeded to introduce the same conductors into the bladder of a middle-sized bitch, but with a fucible calculus fixed between them: the bladder was then distended with water, and the conductors were connected with the galvanic trough. After the calculus had been thus acted on, for an hour twice daily, during six days, it had lost more than an eighth-part of its weight, and had become so weak and brittle, that it could not be introduced again into the bladder. The animal was killed a few days afterwards, and the bladder was found to be quite free from injury or disease.

Shock of an Earthquake felt at Sea.—Through the kindness of our friend Mr. Parson, and of Captain Finley, we are enabled to lay before our readers the following extract from the log-book of the Orpheus, from which it will appear that the shock was felt synchronously at two places, somewhat distant from each other. We have not yet heard of any volcanic eruption, which could have been the cause of the phenomenon.

Extract from the Log-book of the ship Orpheus, from England to Ceylon:—

"Monday, 10th February, 1823.—At 1 h. 5 m. P. M. steering N N W. at the rate of five miles per hour, a little swell from the SSE., felt a motion as if the ship were running over the ground, or some other solid substance; and at the same time, for from 60 to 65 seconds, heard a confused grinding tremulous noise, affecting the ship in every part: we sounded with twenty fathoms of line up and down, but no ground. The sea was not the least confused, nor could we perceive the smallest appearance of any thing which could occasion this noise and motion. The ship was not felt to strike once: she kept perfectly upright in her way through the water, and answered the helm; nor did she make any water in consequence of the shock received. At 2 h. 5 m. P. M. another shock was experienced, but much lighter than the first; and about 3 P. M. a third, which was only just perceptible. The first was so violent as to unship one of the compass cards from its point in the binnacle; and a pair of boots, which were hanging on a nail driven into the mainmast between decks, were shaken off. The ship's place at the first shock was 1° 10′ N. 84° 6′ E.; at the second, 1° 15′ N. 84° 4′ E."

A VERY spirited and interesting volume, composed during a residence of several years at Rome, has just appeared. It is entitled *Tablettes Romaines*, and contains observations on the manners, ceremonies, government, and objects of curiosity at Rome. The author is both a wit and a philosopher; he has gleaned many striking anecdotes, and received many *sage* lessons in the *capital* of the *Christian World*.

"Pius VII. in later times (he says,) never spake of Napoleon but with respectful admiration. When he returned from the Isle of Elba, he addressed to the Prince of Canino the most hearty felicitations on *le revenant miraculeux*, and assured Lucien that the anointed might always reckon on him who had anointed him.

"Canova was very familiar with Napoleon, and was often alone with him and Josephine. The warrior joked the artist. 'You make conquests on marble (said he) they are harder than mine.' "And perhaps more durable," observed Canova; and then he entreated him to rest amidst his trophies, to consolidate his power, and no longer to risk a destiny so often assured

by victory. The Emperor laughed at the sculptor's fears. 'I fight new battles (said he) as you make new statues.' "It is very different, (said the sculptor;) an artist ought never to stop in the pursuit of the fine arts; there we may always march on from conquest to conquest. Mediocrity alone conceives that the goal is attained; but a thousand dangers await the warrior on the road of ambition: think of Cæsar, and a multitude besides." 'You anticipate for me, then, the *ides* of March!' "Ah! I apprehend less for your death than defeat." 'I fear neither the one nor the other; both will find me as immoveable as your statues.'

"After Napoleon had married Marie Louise, he appeared dissatisfied that Canova did not compliment him. '*Puis-je vous feliciter, (dit Canova) d'avoir fait divorce avec la fortune?*' "

The *Tablettes* present many curious anecdotes of the brigands who infest the states of the church, on the ceremonies that distinguish them, and on the *belles dames* who adorn them. *Lit. Gazette.*

In the space of five years, (from the first of January, 1817, till the end of December, 1821,) 1730 cases of suicide have occurred in Paris. Of these, 1124 were males, and 606 Females—862 were married, and 868 unmarried. The causes were as follow:—

1	Love	121
2	Diseases, disgust of life, alienation, domestic quarrels	628
3	Gaming, lotteries, debaucheries, &c.	228
4	Indigence, and deranged affairs	342
5	Fear of punishment and blame	58
6	Motives undiscovered	353

(*Archiv. Gen. Nov.* 1823.) Total 1730

Evening Amusements for March.—The geocentric latitude and longitude of a planet is its apparent situation in the heavens, as seen from our earth. We have given them for two days in the month, that the student may find their places on the celestial globe. We have, likewise, given the latitude and longitude of the Moon, for five different days, at 8 o'clock in the evening, for the same purpose, and would recommend their being transferred to the terrestrial globe, to find out in what part of the world they continue above the horizon without setting, —where they are in their zenith at any particular hour, where rising, and where setting. Thus we find, on the 1st March, Jupiter is nearly on the Tropic of Cancer, consequently does not set to the inhabitants near the Arctic Circle, and passes perpendicularly over the heads of those in latitude 23° 32′ N. Many evenings (when the weather obscures the stars) may be thus usefully and profitably employed. The discovery and powers of the magnetic needle, its great utility to the astronomer, navigator, and surveyor, &c. will fill up others. History may occasionally be introduced with much advantage, and voyages and travels afford a never-failing fund of interest and improvement. With respect to the latter, we would suggest that each individual have a map of the world before him, and the younger persons be required to give the latitude and longitude of those places mentioned particularly by the traveller or mariner, with their history, politics, customs, manners, and any other information which the superior knowledge of the parent or teacher may require. These exercises will be found uncommonly interesting, and fix a lasting impression on the mind of the pupil. *Lit. Gazette.*

Ship preserving.—Sir H. Davy and Sir Robert Seppings have been at Portsmouth, applying a chemico-mechanical process, by way of experiment, for the preservation of shipping. This consists of the introduction of iron or zinc in union with the coppering on the bottoms of vessels, by which means their sheathing is rendered electro-negative, and resists the corrosive action of the salt-water. The Samarang of twenty-eight guns, the Manly gun-brig, and several boats, have been coppered on the new principle.

Anecdote of Nelson.—At Yarmouth, the Wrestlers' Inn is more celebrated for the *jeu d'esprit* of the immortal Nelson than any thing else; who, when the landlord requested permission to call it Nelson's Hotel, and place his Lordship's arms over the door, gave him full permission to do the former, suggesting at the same time the omission of the latter ceremony, on the ground that he had *no arms to spare.*—(*Sayings and Doings.*)

The Diorama.—The last picture exhibited at the Diorama in Paris, is painted by M. Daguerre, and represents the ruins of the Chapel at Holyrood-house. It was before its restoration, in the year 1816, that M. Daguerre visited Holyrood; and he has represented the chapel therefore in its state of dilapidation. Illuminated by the vague and uncertain light of the moon, the disk of which is occasionally covered with fleecy clouds which diminish its splendour, the first impression made by this picture is irresistibly melancholy. The recollections which the sight of the ruins awakens, are of a nature well calculated to plunge the mind into a kind of reverie, which however is far from unpleasing. Independently of the means employed to vary the appearance of the clouds and the brilliance of the light of the moon, the artist has introduced several episodical circumstances to aug-

ment, if possible, the general impression of his picture. In the midst of the ruins he has represented a female, dressed in a white robe, with a black girdle, praying near a tomb, on which she has placed her lamp. 'What is the feeling which has drawn her at midnight, to the heart of such a solitude?' While every spectator is putting this question to himself, and answering it according to his individual disposition, a flute, which appears to sound from the same place, breathes forth an old Scotch air, and completes the illusion.

Autographs. — A foreign merchant has recently brought a precious collection of about 3000 Autographs to London, which, being accompanied by biographical notes, are rendered more generally interesting than they would be, were they confined to the mere signatures, &c. which are sufficient to recommend such documents to the curious. They are divided into several distinct classes:—

Ex. gr. 1st. A great number of charters, from Charles VII. to Louis XVIII. of France.—2d. Celebrated persons in England, such as James II., Cromwell, Marlborough, Locke, Pope, Blackstone, Bolingbroke, Garrick, Gibbon, Robertson, Hume.—3d. Great men of the period of Louis XIV.; Flechier, Bordaloue, Turenne, Conde, Richlieu, Colbert, le Brun, Mignard, Boileau, La Fontaine.—And 4th. The preceding age, including L'Hopital, Amyot, Montaigne, Malherbe, &c.—5th. Italian; Ariosto, Tasso, Machiavel, Metastasio, Domenichino, &c.—6th. German; Copernicus, Leibnitz, Wieland, Herder, Klopstock, Schiller, Goëthe, Kant, Mengs, Mozart, &c.—7th. French Revolutionists, such as Robespierre, Collot d'Herbois, Carriere, &c.—And 8th. Famous Frenchmen of the last age; Buffon, Diderot, d'Alembert, Marmontel, &c. To these Autographic riches of former times, we understand, are added an immense number of Autographs by distinguished contemporaries. The whole series is of great interest, and if it comes to be disposed of, as it probably will, must excite a strong sensation among our amateurs in that way.

Mr. Patrick Connolly, Surgeon, found guilty of manslaughter, at Hertford, is sentenced to be transported beyond the seas for the term of his natural life.

We have much pleasure in announcing that a subscription has at length been opened in behalf of Mr. J. Murdoch, the early preceptor and friend of Burns, the universally admired Scotch bard. The poor old man, at the age of 77, is destitute. It is scarcely necessary to add another word, than that subscriptions are received for his benefit, at Messrs. Coutts', Strand.

Mr. Hausten, professor at Christiana, in Norway, and one of the best natural philosophers in Europe, intends to take a journey across Europe and Asia, under the 60th degree of latitude, for the purpose of observing the variation and the depth of the magnetic needle, the length of the pendulum, and various other phenomena. He will be accompanied by a young mineralogist, who is a good draughtsman, and is acquainted with botany.

A Mr. Matthias Robinson has obtained a patent for his truly valuable and important mode of preparing barley and groats. To the faculty, private families, &c. as affording a nutritious and wholesome food for infants, sick people, &c. &c. it must doubtless meet with ample patronage.—*(See Advertisement at the beginning.)*

London Vaccine Institution.—Yesterday (Feb. 12.) the Governor and Members of this institution met at the City of London Tavern, for the purpose of receiving the annual report. W. D. Cordell, Esq., in the Chair.

The Chairman said, in addressing the Meeting, that the report would give great satisfaction to the friends of humanity, although prejudice still continued to be the means, unfortunately, of sacrificing the lives of thousands.

Dr. Walker read the report. It stated that the benefits of vaccination were diffused to the inhabitants of every land, but in this metropolis the *fomites* of the small-pox still lurked amongst the ignorant and prejudiced part of the population—774 persons fell victims to the dreadful disease in the course of the last year within the bills of mortality. The managers continued to watch the departure of vessels to foreign nations as well as to all the British colonies, and continued to afford supplies of the vaccine ichor for the protecting the colonies from the small-pox. During the last year there had been vaccinated by Dr. Walker 3,236 persons; by the appointed inoculators in the metropolis and its environs, 18,987; by the appointed inoculators in the country, 21,664; from the beginning, by Dr. Walker, 52,116; from the beginning by the town inoculators, 185,235; from the beginning by the country inoculators, 484,693. Dr. Walker had supplied from the beginning 98,850 applicants. The receipts of the institution since the last year's report amounted to 867*l.* 16s.; the disbursements to 1067*l.* 19s. 3d. Balance against the Institution, 200*l.* 3s. 3d. The receipts of the Institution since its formation in 1806 amounted to 11,830*l.*, the disbursment to 11,917*l.* 5s. 3d.

The report was then unanimously approved, and adopted.

The Chairman, in proposing the thanks to Dr. Walker, complimented the ve-

nerable Doctor upon his perseverance, zeal, and skill, and observed that the system had immediately benefited by his exertions.

Thanks were then voted to the Presidents, the Vice-Presidents, and the Managers of the Institution; and the Meeting separated.

ROYAL UNIVERSAL DISPENSARY FOR CHILDREN.—Yesterday the Annual Festival, in commemoration of this Institution, was held at the City of London Tavern. His Royal Highness the Duke of York in the Chair. Exactly 220 Gentlemen sat down to dinner, among whom were—Lord Bolton, the Hon. and Rev. ——Turnour, Sir C. Flower, Bart.; W. Thompson, Esq. M. P., T. Wilson, Esq. M. P., R. Barnard, Esq. M. P., Aldermen Garratt and Key, the Rev. Dr. Keung, Charles Barclay, Esq., T. Lett, Esq., T. Moulden, Esq. and Robert Hodson, Esq. &c. &c. Between 5 and 600*l.* were subscribed; and upwards of 500*l.* were lent, by various Gentlemen, to be repaid in five years, without interest. His Royal Highness the Duke of York quitted the room about ten o'clock, when Mr. Alderman Garratt was called to the Chair, and the friends of the Charity continued to enjoy the festivities of the evening to a late hour.

Field-Marshal H. R. H. THE DUKE OF YORK, &c. &c.—This is a print of the Commander-in-Chief, published by Mr. Sams, as a Companion to that of His Majesty. It does not strike us as being either so good a likeness or so respectable a work of art; but this is, perhaps, principally owing to our dislike of the expression in the countenance, which conveys no idea of the intents of the original. We know not whether the mind is vacant or in deep thought; whether the eye is looking at an object or absorbed in reflection. The arms and shoulders also appear to be out of drawing. The publisher should mind these matters—put spirit and the usual look of H. R. H. into the face; and the picture will be fitter to pair with its royal predecessor.

SIR ASTLEY COOPER, BART. *Surgeon to the King, &c.* Portrait, drawn by J. W. Rubidge; engraved by J. Alais. Published by Cox, Southwark; Hurst & Robinson, London.

An able engraving of an able man is always welcome to the public; and the present will, we imagine, be more than welcome to the medical profession, of which its subject is so distinguished an ornament. Unacquainted with the original, we cannot speak of the likeness; but the head is well engraved, the countenance full of intellect, and the other parts executed in a vigorous sketchy style, which does credit to the Artists.—*Lit. Gaz.*

N. B. We are happy to add our own testimony to the above, from a knowledge of the original.—ED.

BIRTH.—On Tuesday, the 9th instant, the Lady of Frederick Tyrrell, Esq. Surgeon, of St. Thomas's Hospital, of a daughter.

MARRIED.—On the 6th of March, at Woodford, in Essex, Mr. T. G. Willes, Surgeon, to Ann, only Daughter of W. Farmer, Esq. of Shadwell.

Obituary.

On the 20th ult, at his residence, Foregate-street, Worcester, George Woodyatt, M. D.

On the 18th ult, at Greenwich, Thomas Caernarvon, Esq. Surgeon.

On the 28th ult, Mary, the lamented wife of C. H. Parsons, Surgeon, Footscray, Kent; in the 22d year of her age.

Mr. Bowditch, the African traveller, expired, after great sufferings, on the 10th of January, a victim to the cause of African discovery. His widow and three children are left entirely unprovided for. She accompanied her husband to Africa, and entered with the utmost zeal and enthusiasm into all his views and pursuits, which she was eminently qualified to promote by her fine talents as an artist, and her extensive knowledge of several branches of natural history. (*Cambridge Chronicle*).

On Tuesday evening, the 10th ult., in Chatham dock-yard, aged 37, Daniel Davies, Esq., Surgeon in the Royal Navy, and assistant-surgeon of the dock-yard.

On Saturday, Sir Thomas Bell, late one of the sheriffs of London, and Treasurer of the Scotch Hospital.

At Chelsea, Robert Hall, M.D. late surgeon to the forces, a descendant of the ancient border family of the Halls of Newbiggen, and great-grandson of Henry Hall, of Haughead, the celebrated covenanter, who fought at Bothwell-bridge, Drumelog.

During the last week, at the age of 59, in penury, Mr. John Davy, one of the best musical composers of our time; he resided at obscure lodgings in May's buildings, St. Martin's-lane, and sunk into the grave

"Without a friend to close his eyes."

He was a native of Crediton, Devonshire, and a pupil of Dr. Jackson, of Exeter, from whose school he came early in life to London, and produced works not unworthy of his master or himself. Among these *the Bay of Biscay O*, *Just Like Love*, and many others were and are still extremely popular. He also composed several operas, the latest *Rob Roy Macgregor*, for Covent-garden, and *Woman's Will*, for the English Opera-house.

THE MONTHLY

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" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

ANALYSIS OF MEDICAL JOURNALS, &c.

THE EDINBURGH MEDICAL AND SURGICAL JOURNAL. Number LXXVIII. *being the first Number of a New Series.*

Art. I.—*Contributions to the Pathology of the Stomach, the Pancreas, and the Spleen. Part I. Inflammatory Affections and Ulceration of the Stomach.*—By John Abercrombie, M. D.

" Acute inflammation of the stomach," says Dr. Abercrombie, " is not a common disease in this country; and, when it does occur, the symptoms are so severe, and so well defined, as immediately to indicate the nature of the affection. But the stomach is liable to inflammatory action in a chronic form, which often advances so slowly and insidiously, that the dangerous nature of it may be overlooked, until it arrives at that period of its progress in which it assumes the characters of organic and hopeless disease. In the early stages of this affection, the prominent symptoms are often such as merely indicate derangement of the functions of the stomach, and are consequently very apt to be included under the general term dyspepsia. The patient complains of acidity, eructations, flatulence, and oppression of the stomach after eating. There is usually pain, but it varies very much both in degree and in its duration. In many cases it is only complained of after eating: it continues in considerable severity while the process of digestion is going on, and subsides after this process is completed. The appetite in these cases is frequently unimpaired; but the patient is afraid of taking food, on account of the pain which is induced by it. In other cases, there is permanent uneasiness, but it is aggravated by taking food; frequently there is tenderness of the epigastric region on pressure; and sometimes there is pain in the back, at the part corresponding with the seat of the stomach. Vomiting is apt to occur; but in the early stages it is only occasional, and is ascribed to incidental causes. Afterwards, it becomes more frequent, but still without that degree of regularity which appears to indicate serious disease. By great attention to diet, it may occur but seldom, and the disease may go on for several months without exciting alarm. The vomiting then becomes gradually more frequent, and the uneasiness in the stomach more permanent, until the patient either sinks by gradual wasting, or is cut off more rapidly by hæmatemesis; in some cases before the disease has been of long standing. In some of these cases there is little pain, the prominent symptom being the attacks of vomiting, which become gradually more and more frequent. In other cases, vomiting does not occur till a very advanced period, the leading symptoms being the pain, excited or increased after

eating, with severe dyspeptic symptoms, and gradual wasting."

"The disease, which is going on during this course of symptoms, consists of chronic inflammation, which in many cases appears to commence in a circumscribed portion of the mucous membrane of the stomach. The progress of it appears to be extremely slow; and it is probable, that it may continue for some time, and then subside, and appear again after a considerable interval, until it at last produces more permanent effects, in thickening of the coats of the stomach, by adhesion to the neighbouring parts, and ulceration."

After the enumeration of these symptoms, Dr. A. illustrates his observations by well marked cases, of various forms of the disease, with the post mortem appearances; which are extremely interesting to the general practitioner; all of which, it would appear, had resisted the usual mode of treatment. We give the following case, where the disease had more the appearance of cancerous ulceration than any of the preceding; and, as Dr. Abercrombie observes, being the most remarkable example that has occurred to him of destruction of the stomach by ulceration.

"A lady, aged 49, had been in bad health through the winter 1811-12, complaining chiefly of general weakness, and a constant uneasiness across the epigastric region, with occasional attacks of acute pain towards the left side. In May, 1812, she began to be affected with vomiting, which continued from that time, and became more and more urgent. I saw her in July, and found her much emaciated and reduced in strength, so as to be confined to bed. She complained of an obtuse pain in the epigastric region, where considerable hardness was felt; and she vomited a portion of every thing she took, sometimes immediately after taking it, and sometimes a considerable time after. The pulse was weak, and rather frequent. She continued with very little change till the beginning of September, when the vomiting subsided, and she was completely free from it for more than a fortnight. During this time she was affected with diarrhœa; her strength sunk, and she died on the 23d, the vomiting having returned three or four days before her death, though with less severity than before. During the period when she was free from vomiting, she took food and drink of various kinds, and in very considerable quantities, and continued to do so till a few hours before her death. *Dissection.*—On opening the abdomen, and looking for the stomach, a large irregular opening presented itself, which was found to lead into the cavity of the stomach, a large extent of the great arch being entirely destroyed. On the left side, in the region of the spleen, there was found a large irregular mass, which appeared to consist of an enlarged and diseased spleen, and the remains of the great arch of the stomach, so blended into one mass, that it was impossible to distinguish one part from another. In the substance of it there was a cyst full of very fœtid matter. This matter was attached to the cardia by a narrow neck, which remained of the coats of the stomach at that place; and when the parts were taken out and displayed by suspending the stomach by the cardia and the pylorus, the appearances were very remarkable. When stretched out in this manner, about one half of the stomach, at the pyloric extremity, was sound and healthy. This portion was attached to the cardia by a narrow portion of the small curvature, which remained; and, by another small portion of the great curvature, the mass now referred to hung down on the left side. The remainder of the stomach, consisting of the left side and lower part of the great arch, was entirely wanting, to such an extent, that when the parts were extended in the manner now mentioned, it appeared that nearly one half of the stomach had been destroyed. There was reason to believe, that the part which seemed to be wanting was involved in the diseased mass on the left side, and that the sound parts had been separated from this portion by a line of ulceration, of such extent that the sound extremity remained attached to the cardia only by a portion about two inches in breadth, which remained of the small arch. The ulcerated edge, where the separation had taken place, was studded with numerous hard tubercles, like the edges of a cancerous ulcer. The pancreas was hard, the liver pale and soft, the other viscera were healthy.

Dr. A. remarks, that, upon the whole, it appears that this important part of pathology is still involved in much obscurity; but it is of much importance to be kept in mind, as an established principle, that symptoms which, at first sight, appear to be merely dyspeptic, often depend upon chronic inflammation of the stomach. Where the diagnosis is so difficult,

indeed, the practice must be often empirical; but, when dyspeptic symptoms are unusually severe, or unusually obstinate, or are accompanied by an unusual degree of emaciation or debility, we ought always to suspect the existence of some more deep-seated cause, than that condition of the stomach which we usually understand by the indefinite term dyspepsia. The treatment, in such cases, must be regulated by the period of the disease, and the activity of the symptoms. They will probably seldom admit of general bleeding; but much benefit is obtained from topical bleeding, blistering, issues, and the tartar-emetic ointment. The food should be of the mildest kind, and in very small quantity, with abstinence from all stimuli, and from bodily exertion. Hence the importance of distinguishing the affection from dyspepsia, whenever the distinction can be made, as the regimen and exercise proper in dyspeptic cases would probably be injurious.

Whether the disease can be cured after it has advanced to the stage of ulceration, may perhaps be doubted, and it cannot be easily determined; because, when a case terminates favourably, we have no means of ascertaining that ulceration really existed. From what we observe, however, in regard to the intestinal canal, we have good reason to believe that ulceration there may terminate favourably, provided it be simple ulceration of the mucous membrane, without tubercular disease, or much thickening of the coats of the intestine. I think I have seen the cicatrices of such ulcers, when the patient has died of another disease, after having been for a considerable time free from every complaint of the bowels. It is probable that simple ulceration of the stomach may admit of the same favourable termination; and we certainly see cases get well, in which, from the violence and duration of the symptoms, we had good reason to suppose the existence of that disease. Of the various remedies that are employed in such cases, it is not easy to say which are really beneficial. Mercury, in small quantities, seems to be useful in such cases — in others, lime-water, and the oxyd of bismuth; but the remedy from which I have seen the most decided benefit, in cases in which I have suspected the existence of that affection, is the sulphate of iron. The following case will serve as an example of the affection which I here refer to.

"A lady, aged about 30, came to Edinburgh from a distant part of the kingdom, in summer, 1818. She was affected with a violent pain of the stomach, which seized her every day, immediately after dinner, continued with great violence through the whole evening, and gradually subsided about midnight, or soon after it. It sometimes attacked her after breakfast, but more rarely. The complaint was of two years' standing, during which time, great variety of practice, and every variety of diet, had been tried, with but very slight and transient benefit. The paroxysms occurred with perfect regularity; and she was considerably reduced in flesh and strength. In the epigastric region, no swelling could be discovered; but there was considerable tenderness on pressure at a particular spot. She had a sallow unhealthy look; and her whole appearance gave strong ground for suspecting organic disease. Various remedies were employed during the summer, with little advantage. At last she appeared to derive some benefit from lime-water, and returned home in autumn, 1818, rather better. But the affection soon recurred; and she returned to Edinburgh in 1819, as bad as ever. After another trial of various remedies, this severe and untractable affection subsided under the use of the simple remedy to which I have referred. She took gr. ij. of sulphate of iron three times a day, with a few grains of aromatic powder, and, with the addition of a small quantity of aloes, so as to regulate the bowels. Under the use of this remedy, she was very soon free from complaint, and has continued to enjoy good health.

"There are, continues Dr. A., other affections, which seem to be connect-

ed with inflammatory action of the mucous membrane of the stomach, but I shall only allude to one of them. A woman, aged about 30, and previously healthy, in the course of a slight febrile disorder, became affected with pain and tenderness of the epigastric region, extending over the abdomen. The mildest articles of food produced great pain. There was diarrhœa, with much griping and frequent vomiting. The affection was accompanied by a very feeble pulse, great debility, and collapse of the features; and there was a peculiar rawness and tenderness of the tongue, mouth, and throat. After various remedies had been tried, without benefit, these symptoms subsided speedily under the use of lime-water.

Art. II.—*Case of Subclavian Aneurism.* By J. H. Wishart, F.R.S.E. Surgeon in ordinary to his Majesty in Scotland.

The particulars of this case have been given in the old series of this magazine, to which we beg leave to refer our readers.

Art. III. *Successful Case of Amputation at the Hip-joint. By* James Syme, Member of the Royal College of Surgeons of London and Edinburgh, and Lecturer on Anatomy in Edinburgh. (See No. 51, old series).

Art. IV.—*Remarks on Amputation.* This article is also by Mr. Syme.

Mr. Syme commences by calling to mind the thickness and acute sensibility of the parts necessarily divided in the amputation of a limb, together with the size and number of blood-vessels cut across, as well as the extent and complicated nature of the resulting wound, observing, that it seems wonderful any operation in surgery should be undertaken, with more care or preparation. "Yet the fact is, that while few surgeons venture on extracting the cataract, extirpating tonsils, opening the trachea, and other operations of little magnitude but dangerous execution, every tyro in our profession looks upon himself as fully qualified to dismember his fellow-creatures."

We shall offer the subsequent remarks on this subject as coinciding nearly with our own, extracted from a quarterly journal. "If the following be the present practice of the Edinburgh surgeons, a censor in that metropolis appears necessary. The manner of proceeding here, as every surgeon knows, is, first, to dissect back the skin *for some inches*—then to cut the muscles as high as they are exposed—and, lastly, to remove the bone as far up as the retraction of the flesh will allow." We can only say, that no such practice is followed by any good modern surgeon on this side of the Tweed. Twenty or thirty years ago, indeed, we have seen the skin and cellular membrane turned up *about an inch and a half*, like the cuff of a coat, and then the muscles divided down to the bone, by one circular incision. But this practice has long been abandoned. In the thigh, for instance, the circular incision reaches the muscles, and then the integuments retract and are assisted in retraction—but not separated by dissection from the muscles underneath. Another circular incision, with the edge of the knife slanting upwards, divides the superficial muscles. These being allowed to retract, a third slanting circular is made to the bone, which is insulated an inch or two, and then sawn through. The limb thus removed presents the form of a cone, with a cylinder of bare bone at the apex. It is manifest, that, in this way, an excellent cushion of muscle, and a sufficient covering of skin, are left for the formation of a good stump. Such is the English practice, and certainly it forms a great contrast with that of Edinburgh, as represent-

ed (we hope somewhat in caricature) by Mr. Syme. The practice of the French surgeons—at least of their head—M. Dupuytren—is still worse than the Scotch. M. Dupuytren cuts all the soft parts at once to the bone, which he next removes, after retracting the muscles to what he considers a sufficient extent. But here he is not particular, as on most occasions he makes no attempt to obtain union by the first intention. Indeed, I have seen him dress the bone all round with dry *charpie*, previously to *approximating* the edges of the stump, for it was seldom possible to bring them into contact." After condemning all forms and modes of amputation by circular incisions, our author goes on to recommend the flap operation. This operation, we are aware, is very useful, and even necessary on some occasions, as in the leg and at joints: But we doubt much whether it will ever come into universal practice in every kind of amputation, as Mr. S. recommends. We shall give Mr. Syme's directions, however, on the subject.

"Lisfranc recommends a long very narrow knife, sharp on both edges; but I think the one used by Mr. Liston better calculated for the purpose. It is about six inches in length, and five-eighths in breadth, thin and blunt in the back, except for an inch from the point, which is very sharp; the back is straight and so is the belly, except about an inch and a half from the point, which is slightly convex.

"The dimensions which I have stated are fully sufficient for the arm and fore-arm, the leg, and all amputations in children; for the thigh of an adult, a greater length will of course be required.

"The surgeon grasping the limb with the left-hand, at the place where it is to be removed, ascertains the situation of the bone by means of his thumb. He then introduces the knife over the bone at that part where he wishes to apply the saw, and, perpendicularly to it, he passes close by its side, and so on until the point appears directly opposite.* This finishes the first part of the operation, or the transfixion, as it is called; after which, he cuts his way outwards, in a line forming an angle with the bone, more or less acute according to circumstances, so as to complete one flap.

"He then embraces the remaining undivided parts with his left-hand, and, gathering them together, passes the knife on *their* side of the bone, so as to insulate it completely. Removing the restraint of his left-hand, he now forms a second flap in the same way as he did the first.

"If there is only one bone, he immediately divides it, his assistant holding aside the flaps with his hands as high as it is exposed; if there are two, he separates the interosseous substance, and does the same thing; thus finishing his operation, which, with reasonable haste, and without the smallest hurry, need never occupy more than half a minute at most."

The following remarks are afterwards offered by Mr. Syme, relative to Mr. Lisfranc's mode of operating on fungus, toes, &c.; who, Mr. S. observes, is a great advocate in favour of disarticulation, and who also teaches the method of operating for most of the joints of the extremities;

* "There is some difference of opinion as to whether this first flap should be formed from the external or internal side of the limb. But as this seems to me a matter of perfect indifference, unless in reference to the operator's convenience, I would advise the surgeon, unless he be ambidexter, always to pass the knife, in the first instance, on that side of the bone which corresponds with his right hand as he stands before the patient."

indeed, all of them, with the exception of the ankle and knee. "He does not, however, approve much of amputation at the wrist and elbow. It is at the joints of the fingers and toes, those of the first and fifth metacarpal bones, that of the metatarsus with the tarsus, together with those of the shoulder and hip, that he decidedly recommends disarticulation.

"The plan of operation in all these cases is, generally speaking, the same, viz., to cut into the joint in one side, and out of it at the other; taking care that, in doing so, one or more flaps are preserved from the parts best able to afford them. The instrument employed is, on all occasions, a long narrow knife, the dimensions of which will of course be varied according to the size of the parts concerned. For the fingers and toes, a common straight operating bistoury is sufficient; for all other cases, a much larger knife is required; and for the hip-joint, one not less than a foot in the blade is necessary.

Mr. Syme next describes which seems to him the best of Lisfranc's operations for disarticulation.

"In amputating the first and second joints of the fingers and toes, a single flap, sufficient for covering the bone, is saved from the palmar aspect. The operation may be done either when the hand is held in firmation, or placed in supination. In the first the surgeon cuts right into the joint with his bistoury, which he then carries closely along the surface of the phalanx about to be removed, until he obtains flap enough for the purpose. In the second case, he pushes the knife through the finger parallel to the bone, and close by the joint. He then detaches precisely the same flap, which, being held up by the assistant, he finishes the operation by cutting directly through the joint.

"In separating the fingers and toes at their metacarpal and metatarsal joints, two lateral flaps are formed, one in entering the knife into the articulation, the other in cutting its way out.*

"Passing over the removal of the first and fifth metacarpal bones, and that of the metatarsus in whole or in part, I shall proceed to describe two of Lisfranc's operations, which, of all those he has contrived, deserve the highest approbation—I mean those for disarticulating at the shoulder and hip-joints. In amputating at the shoulder-joint, he introduces the point of the long knife, usually employed, at the hollow, between the anterior edge of the clavicle and coracoid and acromion processes; he pushes it backwards and downwards, so as to pass through the capsular ligament, and brings it out at the posterior and lower margin of the axilla. He then cuts outwards, following closely the direction of the head and neck of the humerus, until he obtains a flap from the deltoid and other muscles, sufficiently large. This finishes half of the operation, which is completed by passing the knife round the bone, and cutting away a second flap from below. No operation can be more speedy, simple, and better calculated for obtaining good flaps than this, which Lisfranc actually performs on the dead subject in two seconds.

In operating for the hip-joint, Lisfranc proceeds in the following manner:—"The patient being placed on his back, he introduces the point of a very long double-edged knife into the fore-part of the thigh, over, or rather a little above, the articulation of the femur with the acetabulum.† He pushes it close past the

* Candour is a never-failing ingredient in the character of a good surgeon.

Mr. Liston was in the habit of amputating fingers and toes, by making two lateral flaps with a scalpel, and dividing the bone by means of the cutting pliers, which he has contrived and employed so extensively and successfully in operating on diseased bones; but on learning from me the method of Lisfranc, described above, was so much pleased with its facility and other advantages, as to adopt it almost exclusively.

In the same way, the illustrious Baron Dupuytren made use of the instrument just mentioned, at my suggestion, with the most perfect success, in the Amphitheatre of the Hotel Dieu, and in a case, too, where even he expected to meet with very considerable difficulty.

Mr. Liston, however, still, as formerly, employs the cutting pliers when it is necessary to take away a portion of the metatarsal or metacarpal bones; and no method can be better calculated for the purpose, since it is easy, certain, and speedy; enabling the surgeon to perform instantly, what, with the employment of half-headed trephines, chain-saws, Machel's saws, circular saws, and other ingenious toys, would, if perfected at all, require hours of hard work.

† To determine the proper part for this purpose, Lisfranc advises us to measure three quarters of an inch directly inwards from a point an inch and a half distant

neck of the bone, and brings it out on the opposite side of the limb, a little below the tuberosity of the ischium. Then he cuts outwards, following the shape of the trochanter major, and proceeds close down along the femur for an inch or two below that process. He at last turns the edge of his knife, and completes the first or external flap. The arteries which have been cut should now, according to his advice, be tied. The second part of the operation consists in forming an internal flap, by grasping the undivided parts in the left-hand, and passing the knife close to the inner side of the neck of the femur, so as to detach it from all connection with the muscles, and then cutting downwards, attending to the shape of the trochanter minor, below which the knife should be carried for an inch or two, and then turned gently outwards, so as to finish the second flap. It is obvious to one acquainted with the anatomy of the parts, that, as long as the surgeon merely cuts downwards, and keeps close by the bone, he will not injure the femoral artery, which cannot be divided until the knife is carried outwards: And here lies one great excellence attributed by Lisfranc to his operation; for, before the surgeon cuts the femoral, the assistant is enabled to introduce his fingers at the solution of continuity, and compress the vessels. The arteries of this flap also having been secured, nothing remains but the third part of the operation, or the disarticulation, properly speaking.

To effect this, the surgeon, seizing the limb with his left hand; while the assistant holds aside the flaps, makes a cut half round the margin of the acetabulum at its fore-part, with the same keenness as if, says Lisfranc, he expected to cut through the head of the bone. The capsular ligament having been thus fairly opened, he performs abduction, starts the bone from its socket, passes the knife round its head, cuts the triangular, and what remains of the capsular ligament, and so finishes the operation.

Art. V.—*Observations on Amputation.* By Robert Liston, Fellow of the Royal College of Surgeons, London and Edinburgh, Lecturer on Surgery, &c. &c.

Mr. Liston strenuously urges his professional brethren to relinquish the tourniquet in amputation, for manual pressure, or the *Spanish windlass;* that is, a silk handkerchief, and a bit of wood by way of a *lever.* This latter mode has been frequently practised at sea, when the tourniquets were not sufficiently plentiful; and is still an admirable, a simple, and an easy substitute for the tourniquet; where the latter is absent; we see, nevertheless, no immediate call for laying aside this apparatus; any more than for preferring the flap to the circular incision, where no particular circumstances prompt the necessity of adopting the one in preference to the other; and, as a general principle, notwithstanding the forcible manner in which Mr. Liston's arguments in favour of the one, and his objections against the other, have been maintained, we much fear neither will ever substantiate a decided claim to superiority.

Art. VI.—*Essay on Caries and its Treatment.* By Robert Liston, Fellow of the Royal College of Surgeons, &c. &c.

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from the superior anterior spinous process of the ileum, in the direction of the knee; but I very much distrust the propriety of giving any such directions; for I have invariably seen *measurements* mislead, when trusted to in performing an operation; and even granting, for the sake of argument, that they may indicate the position of parts concerned in some operations, still I think it will not be denied that they are altogether useless to an anatomist; and it is to be hoped, that no man who is not an anatomist will attempt any important operation.

As this paper is to be continued in the next No. of our "respected contemporary of the North," we shall defer noticing any part of it until it be completed.

Art. VII.—*On Urinary Vaginal Fistula.* By William Cumin, M.D. Surgeon to the Glasgow Asylum for Lunatics, and one of the Surgeons of the Royal Infirmary.

This case, which was successfully treated, was a consequence of long protracted and instrumental labour. The author acknowledges his obligations to the writings of Dessault, who has spoken in such confident terms of the advantage to be obtained from the judicious and persevering treatment of such fistulæ—and from whom he received the idea of the instrument, by which a catheter was retained in the bladder.—(*Œuvres Chirurg. t.* iii.)

"The instrument, says Dr. C., which I employed, consisted of an oval steel spring covered with leather, and made so as to clasp round the pelvis, and fasten over the sacrum; with straps to pass under the thighs, and prevent it from shifting upwards. In the centre, which rested on the symphysis pubis, a screw of metal was screwed on so as to admit between it and the spring a curved stalk, which could be slipped up or down, and fixed with a screw when properly adjusted. At the lower extremity of this stalk, was an aperture, through which a catheter was passed, and introduced into the bladder, then secured in its place by a narrow tape. In this manner a fixed point was obtained, and the motions of the catheter rendered inseparable from those of the bladder and pelvis.

For the treatment of these fistulæ, Dessault (t. iii. p. 297.) observes, "on a deux indications a remplir; 1°, s'opposer au passage des urines dans le vagin; 2°, *rapprocher* autant qu'il est possible, les bords de la division pour favoriser leur re-union." &c. Dr. Cumin further observes, that,

"On perusing the particulars of this case, it is impossible to avoid being struck with the rapidity of the amendment which followed, as soon as a catheter was steadily retained in the bladder. Eleven days after this was fairly commenced, no urine appeared to pass by the fistulous opening; and the bladder had so far recovered its healthy tone, as to retain half a pint of urine when the catheter was carefully plugged. The only reason which I can assign for this speedy favorable change, is the very high irritated and inflamed state of the wound, and the parts around it, at the time this poor woman came under treatment. The very sufferings of this unfortunate person were instrumental in accelerating her recovery; for the moment the inflamed surfaces, from which the slough had separated, were relieved from the irritation of the urine, a healthy action commenced, and the parts began to contract and close up the fistulous opening. From this observation we may draw the practical inference, that, when the edges of such fistulæ have become callous, it will be of essential benefit to apply ointment of cantharides, or some such vesicant, so as to detach completely the thickened cuticle, and dispose the parts to contract and unite, &c.

Art. VIII.—*Description of an Apparatus constructed to afford permanent and complete Quietude in the Treatment of Compound Fractures.* By John Elderton, late house-surgeon to the Northampton General Infirmary.

"Various," says the author, "have been the contrivances which ingenuity has suggested, from time to time, to ameliorate the conditions of individuals suffering under compound fractures; yet, upon a general review, it must appear that the projectors of such contrivances have been occupied more with the principle of attaining ease, and a particular position of the limb, than in the specific object of procuring a permanent state of rest, and steady apposition of the parts disunited.

How far Mr. Elderden has himself succeeded in procuring the desired "permanent state of rest," we are unable, at present, to say, as we have hitherto had no opportunity of either seeing the apparatus in question, or its mode of application to the cases to which it is referred; although we are inclined to think very favourably of it, from the plate, with the explanation given of it in the present number of the Edinburgh Medical and Surgical journal.

Art. IX. — *Observations on Con-*

stipation, with Cases. Read before the Dumfries Medical Society, 6th May, 1822. By William Maxwell, M. D.

Dr. Maxwell, in selecting, as he observes, constipation, or the suspension of the power of evacuating the intestinal canal, as the subject of his first paper for this Society, has confined his observations entirely to cases unaccompanied by change of structure—these he has divided into the following sections: 1*mo*, constipation from indurated fœces; 2*do*, from intus-susceptio, angular position of the intestine, and other visceral displacements, with ileus from spasmodic contraction; and, 3*tio*, immobility of the bowels from paralytic insensibility. The first species was treated with copious and repeated injections of linseed oil, after bleeding, purging, warm-bathing, tobacco, and purging injections had been premised, or rather used in vain. The second, by inflation.

"Having found, by dissection, in several cases that had been supposed intus-susceptio, that the mischief had been occasioned by an angular portion of the bowel stopping the progress of its contents, and that, when the two surfaces adhere, which frequently very soon takes place, there is very little chance of replacing it either by purgatives or watery injections, I thought that the bowel might probably be restored to its natural situation by inflation; and, believing that the same treatment would apply to intus-susception and spasmodic affections, I remained on the look-out for such affections for some years. It was from having failed in relieving a young lady from England, who died in the King's Arms Inn here, about ten years ago, that I first thought of inflation—being sensible that something beyond the power of injection might occasionally be required.

Dr. M. has given four cases, treated successfully by this means, where purgatives, and enemata, had been freely given, as well as blisters and the frequent use of the warm bath; and further observes, that the same treatment (by inflation) has been invariably used with success in seven other cases.

For using inflation, Dr. M. observes that the patient must lie on his back, and that the distension is to be made gradually, pressing the air along the colon into the ilium: and, unless these circumstances be attended to, the operation will not succeed.

The third cause of constipation (immobility of the bowels from paralytic insensibility) is of more rare occurrence; it proceeds from such a degree of paralytic torpor as renders the bowels insensible to the stimulus of cathartics or injections. Two cases of this kind are given, where electricity removed the symptoms in the first; and, although in the second a natural stool was passed with a considerable quantity of urine, the stomach, which had lost all sensation, remained in the same state, nothwithstanding the electric shocks were made to pass through it in all directions, without making any uneasy impression. Dr. Maxwell observes, that the life of this patient was protracted fifteen days longer by broth and opium injections—and that the patient appeared to sink entirely from inanition; all internal medicines and external applications being equally unavailing.

"I shall take the liberty, adds Dr. M., to remark in this place, that endeavouring to prevent vomiting in cases of obstructed bowels, must accelerate fatal symptoms. It is by an inversion of the intestinal action alone that the distended bowel must be relieved from the pressure of its contents, till the impediment be removed. On inspecting the body of Mr. D., a gentleman who died after the operation for hernia, it was evident that vomiting, with inverted action of the ilium, would have saved him, by

removing the immense quantity of fluid in the bowels, which had pressed them to the bottom of the pelvis.

Dr. M. observes, that since this unfortunate case he generally promotes vomiting, even in cases of incarcerated herniæ, although the inverted motion can almost to a certainty be prevented.

Art. X.—*Case of Inflammation of the Spinal Cord, combined with Inflammation and Suppuration of the right Kidney; with the Appearances after Death.* By William Jones, M.D., Surgeon, First Dragoon Guards.

"February 25, 1823. Benjamin Hopkins, æt. 20, of sanguine temperament, native of Leicestershire, by trade a stocking weaver, was attacked a few days ago, with pain in the region of the right kidney, which is now become acute, and extends, he says, to the chest. He has no cough, but the pain is increased on every action of the diaphragram; pulse 108; skin warm; tongue coated; urine high-coloured; countenance pale, and expressive of suffering from pain. The treatment consonant with the above symptoms was put in full force; the patient, notwithstanding, died on the 7th of March; when the following appearances presented themselves on inspecting the body.

"On opening the cavity of the chest, extensive adhesion had taken place between the pulmonary and costal pleuræ of the right side, by effusion of a quantity of coagulated lymph disposed in sacculi, soft and lacerable, as if recently effused. In the cavity of the abdomen, the liver was found unusually large, but without marks of organic disease. The cellular texture surrounding the right kidney was highly vascular; and, in the substance of this kidney were two spots of purulent matter, each about the size of a small pea. At the inferior part of the lower dorsal vertebræ, on the right side, an abscess about the size of a walnut was discovered, of recent formation. A still smaller abscess was found in the same situation on the left side. On sawing through the vertebræ to expose the spinal chord, the theca was found covered by a multitude of red vessels; it was much thickened, with dotted purulent matter on its surface. On opening the sheath, the same degree of vascularity was evident on the cord, the vessels being turgid and tortuous, but seemingly no disorganisation of the substance of the cord. The preparation has been transmitted to the collection of morbid anatomy at Chatham.

"With the view of obtaining information on the probable cause of this combination of disease, I have, since the death of Hopkins, made some inquiries about his previous history, and have learnt from his comrades that he frequently spoke of pain in the back, though it never appeared to have been so severe as to lead him to complain of it to me. In the cavalry service, there are various causes which may excite similar disease in the persons of those otherwise predisposed, and especially among young subjects, who have not attained the maturity of growth and strength. Among these may be enumerated the practice of hard trotting without stirrups, a system of drill necessary to make a good horseman; great exertion of the lumbar muscles in the sword exercise, which requires the twofold object of retaining the seat in various movements, and at the same time wielding arms of considerable weight. If these conclusions be well founded, they show the necessity of attending to the earliest symptoms of uneasiness in young dragoons, and in every fatal case which may be even moderately suspicious, of examining the state not only of the spinal cord, but of every part which is likely to be affected by injury in unusual efforts.

Dr. Jones observes, that, notwithstanding the obscurity of the exact seat of this disease, its inflammatory nature was sufficiently manifest; and that he had, therefore, no doubt about the kind of treatment, and the extent to which it was requisite to carry it. The only circumstance, perhaps, which can with any justice be said to have been less rigorously enforced than he could have wished, was the local detraction of blood; for the general bleedings were carried as far as was consistent with the powers of the patient. Hopkins, indeed, was cupped on the 28th; but had it been repeated, or its effect favoured by the application of twelve or eighteen leeches, at two or three separate times, the progress of the disease, he thinks, might have been

arrested, or its violence moderated. It may be doubted, however, whether this would have prevented the fatal termination. "His death seems to have been occasioned partly by general exhaustion, partly by the disease of the lungs, and, perhaps, by the morbid action being considerably advanced before it led him to apply for relief."

Art. XI.—*Letter to John Thomson, M.D., Edinburgh, containing Observations on the Occurrence of Small-pox, after Small-pox and Vaccination.* By William Stoker, M.D. Dublin. Communicated by Dr. Thomson to Dr. Duncan, junior.

Art. XII.—*A Letter to John Abernethy, Esq., on the Subject of Hernia.* By Edward Geoghegan, surgeon to the General Dublin Dispensary.

This letter contains some excellent remarks and animadversions on the treatment of hernia.

*** As it is our intention to confine our analytical notices to original communications only; we shall simply remark, *en passant*, that the 2d part of this interesting and well-conducted journal, consists principally "of a critical analysis" of several physiological and other works. Part 3*tio*, contains a variety of "Medical Intelligence," much of which has previously and since appeared in this and other journals.

London Medical and Physical Journal. (April 1st.) Original Communications.

Art. I.—*Observations on the Pathology and Treatment of Spinal Diseases.* By Edward Harrison, M.D. F.R.A.S. E.D. *(With engravings).*

In this article, Mr. H. has described the commencement, progress, and termination of two instances of spinal deformity, in which, from the length of time, the parts had grown firm, rigid, and nearly immoveable. The busts of both patients were modelled from nature, by Mr. Mazzoni, from which the engravings of the corresponding drawings which accompany this article were taken, in the same position of the casts. As Dr. Harrison's observations are to be continued next month, wherein the method of treatment he adopts will be detailed, we shall, until that period arrives, defer our remarks, &c.

Art. II.—*Cases of Neuralgia Spasmodica.* Communicated by Benjamin Hutchinson, Esq.

These cases are not the result of Mr. Hutchinson's own experience; but confirmations from others of the efficacy of the carbonate of iron, as recommended by Mr. H. in cases after douloureux. The first is a communication from E. S. Snow, Esq., Surgeon, Chester; relative to a Miss F. *ætat.* 23, of slender and delicate constitution, who suffered excessively from pain in the left side of the lower jaw, which was attributed to a carious tooth.

"The young lady's friends at length became very uneasy, and requested my attendance on the 28th of December, last; when I found her suffering, according to her account, from a severe attack of tooth-ache. Upon examination of her mouth, I found one of the bicuspides much decayed, and the gum excessively irritable and ulcerated, attended with violent twitching pains, shooting along the cheek to the neck and ear. I prescribed fomentations, and a strong embrocation of ether, camphor, and opium, to be freely applied to the gum and within the cheek, and five grains of calomel to be taken at night, and a purgative draught on the following morning. The pain still continued, to which was added a troublesome cough. I recommended a dentist to be sent for, who extracted the tooth very dexterously with a punch, but without any abatement of the pain; which, indeed, increased regularly towards the evening. The appetite now failed, with loss of rest, confinement, &c. which considerably reduced her. Having a great repugnance to medicine, I could not prevail upon my patient to try any thing of that kind, with the exception of an occasional dose of calomel and salts, till Feb. 26, when she consented to try the carbonate of iron, in doses of half a drachm three times a day, which caused so much nausea and griping, that, after persisting

for one week, it was discontinued; but was resumed in a few days, in doses of two scruples, conjoined with a few grains of aromatic powder. In a few days it was increased to a drachm four times a day, with a glass of port wine after each dose, and continued regularly, with evident amendment, and with some days of total absence of pain. On the morning of the 16th, I was gratified to hear she had had no pain whatever for the last week, and she requested to discontinue the powders, as they all disagreed with her bowels, though particular attention had been paid to them.

The cough subsided, the spirits returned, and the gums lost all their tenderness and pain on mastication; the powders were consequently discontinued.

The next communication is by J. Miles, Esq. Surgeon, Throgmorton-street, London, detailing the very distressing case of his own lady, which terminated favourably, and where Mr. M. is of opinion the bark was really an auxiliary previous to the exhibition of a large dose of the carbonate of iron, inasmuch as it prepared the system for this more powerful tonic.

The other communication is from Dr. Marshall Hall, of Nottingham, where it appears paralysis and the most excruciating cramps of the muscles of the legs yielded to the carbonate of iron, &c.

Art. III.—*Illustrations of the Sedative and Febrifuge Powers of Emetic Tartar.* By William Balfour, M.D. of the University of Edinburgh.

"Ne quid falci discere audeam, ne quid veri non audeam."

We shall give the substance of this article at once, in the author's own words.

"It cannot be denied that, in the treatment of inflammation, blood-letting is often practised to an extent, which renders it difficult to say whether the patient is in most danger from the disease or from the means of cure. Reflecting, some years ago, on this subject, it appeared to me that the discovery of a remedy, calculated to supersede the necessity of carrying depletion to such dangerous lengths, was one of the most important desiderata in the practice of medicine. I had long directed my attention to the enquiry, when emetic tartar presented itself to my mind, as the substance most likely to accomplish the object in view. From the effects which it has been known to produce on the exhalants of the skin, it appeared to me probable that it excited a similar power on all the exhalants of the body: consequently, that it must relax and render pervious, not only the exhalants themselves, but all those vessels, also, of which they are a continuation. Now, as in all inflammatory complaints, the functions of secretion and excretion are suspended or impaired, in proportion to the degree of inflammation present, the restoration and support of these functions is the change to be effected in the treatment of inflammation. In other words, to restore these functions, is to effect a cure. Therefore, I concluded, that, if emetic tartar influenced the other exhalants of the body, equally with those of the skin, it must prove a powerful auxiliary to blood-letting, in the cure of inflammation. I subjected it to experiment, and obtained results, the benefit of which to mankind, the facts I have already laid before the public, as well as those which follow, will attest. As often happens, in experiments and observations instituted with a particular view, I made a more important discovery than I had anticipated. I little expected to find the medicine in question to be a direct sedative, independent of its nauseating and sudorific qualities.

Mr. B. gives a case (Master Ormston) here of severe pleurisy cured, *in three days*, by the detraction of only eight ounces of blood, the exhibition of eight grains of tartar-emetic, (in the proportion of a quarter of a grain every hour) and a purgative. The emetic tartar occasioned no nausea or vomiting after the second dose.

"Some time ago," continues Dr. B. "a very near relative of my own, also 15 years of age, was seized with pneumonia. I committed him to Dr. Gregory and an eminent surgeon. They took about seventy ounces of blood from him, in three days. Except purgatives, indeed, and the inhalation of steam, he had no other remedy. He suddenly became extremely exhausted. The family were collected at his bedside, one morning at six o'clock, to see him die. He recruited a little till eleven, when he appeared at the last gasp. The cuticle came off his breast, on the finger being drawn

slightly across. In despair I gave him wine, which was strictly prohibited by Dr. Gregory the night before, and saved him.

Dr. Balfour observes, that his only motive for recurring to this case, is to shew, that the most eminent practitioners in Edinburgh were, at that time, strangers to the sedative and febrifuge powers of emetic tartar. Had it been otherwise, asks Dr. B., would not Dr. Gregory have employed it in the case alluded to, in aid of the lancet?

Dr. Balfour's object, he remarks, in publishing these and another which follows them, is to vindicate his claim to originality, in what he has advanced, concerning the sedative and febrifuge powers of emetic tartar, which it would appear is disputed, though not upon the most unequivocal grounds. Dr. B. observes, in a note, in reply to the "vague and general argument," "that tartrite of antimony and potass has been employed ever since chemical medicines came into use," that before he published (in 1818) on emetic tartar, he consulted several practitioners of the highest eminence, concerning their experience on the subject, and found them, to a man, total strangers to the medicine, qua sedative and febrifuge.

"Dr. Hamilton, sen., observes Dr. B., author of a treatise on purgative medicines, and a physician inferior to none of his day, frankly told me he had not used emetic tartar at all, for a number of years. The fact is, Dr. Cullen frightened the practitioners of Edinburgh from the use of it, by his always administering and recommending it in nauseating doses, in the erroneous belief that in smaller doses it was inefficient.*

(To be continued.)

Art. IV. — *On Medicinal Saturation.* By Dr. Kinglake.

Medicinal saturation consists in filling the system with the peculiar influence of the article that may be employed, so as not to admit of its being further extended without incurring injurious effects; and a great variety of effects may, doubtless, be produced, before this point be fully reached, &c.

"All medicines capable of obtaining an ascendancy over the existing actions of vital power, whether healthy or morbid, must exert an energy that deserves to be scrupulously estimated. It is difficult to say, à priori, what may be the incidental effects of any medicinal agents that have for their ultimate object a remedial change in the morbid actions of life."

Our author very justly remarks, in further illustration of this interesting subject, that

"The natural state of vital action is provided with too many inherent conditions of safety to admit of being permanently superceded by adventitious influence, whether of the morbific or remedial kind. It is only, therefore, when established disease indicates the necessity of endeavouring to superinduce an attendant action in the exertions of living power, that an occasion arises for pushing powerful medicines to the point of saturation. Medicinal efficiency, carried to the extent of affecting the inherent condition of vital action, is a powerful operation, and may induce radical and lasting changes in the organic processes of life. Whatever may be effected by medicinal saturation, it is neither conceivable, nor desirable, that it should be permanent. It will prevail no longer than until the recruiting and regenerating energy of healthy action shall be enabled to resume its natural and habitual ascendancy."

"If health should not speedily supervene the removal of disease by medicinal agency, the remedy may, perhaps, prove as injurious as the disease itself, by substituting its own influence for that of the healthy state, which would not be a curative exchange. No adequate substitute can be made for the healthful state; nor, indeed, can any change be lasting, that is not closely allied to the condition of health. Diseases are often unyieldingly obstinate, but they are variable, and have not the steady uniformity that characterise the natural and healthy state of vital action. All remedies are designed to control and subdue the force of disease. This object can only be effected by means adapted to that end; and those means will be found in all the various degrees of medicinal agency, from slight local excitement to that of systematic excitement

Dr. K., in continuing to point out the salutary influence of medicinal

* See Illustrations of sedative and febrifuge powers of tartar emetic, 1818 & 1819.

saturation, when exerted to overcome the diseased actions of vital power, of medicinal agents, &c. alludes to that class which he denominates the mere active or herculean medicines, required in complicate and difficult cases of disease; such as the various preparations of quicksilver, the mineral acids, the alkalies, the different kinds of narcotics, particularly belladonna, hyoscyamus, cicuta, opium, and digitalis; the sulphates of zinc and iron, tartarized antimony, arsenic, acetate of lead, bismuth, iodine, hydrocyanic acid, colchicum, elaterium, gamboge, hellebore, squill, &c. all which, and other powerful medicinal agents, may be carried the length of saturating the system, so as not to allow of being extended beyond that limit. Were they to be urged further, either the stomach would reject them in the first instance, or an ulterior excitement would be produced throughout the frame, that would disorder the various functions of life, and induce a state that, if protracted, would be not less decidedly, and perhaps seriously morbid than that which was intended to be cured. This is the period then for desisting from active medicine, that may have been taken to the extent of saturating the system with its properties, lest unwarrantable mischief might result from its continuance, no effective medicine can have its use indefinitively prolonged, without producing either salutary or pernicious effects; and a temporary discontinuance of even the best and most certain remedies, when the curative object is not effected in due time, is adviseable, as it at once secures against the evils of prolonged saturation, as well as tends to render the powers of the same medicine afterwards more availing, in effecting its salutary purpose.

This is the substance of Dr. Kinglake's paper, written in his usual perspicuous stile, which he concludes by remarking, that, "early impressions in medicinal agency may be strong, and they may, and often do, continue so, even to the extent of occasioning much ultimate mischief; but they likewise have a tendency progressively to lose of the original force, until at length the effect will altogether cease; thus, the natural and usual aptitude subsisting between the agent and the living power, becomes, by habit, neutralized, and wholly inefficient.

Art. V.—*Case of Internal Hæmorrhage, arising from Rupture of the Fallopian Tube.* By Mr. Thomas Bushell, Member of the Royal College of Surgeons, and Licentiate of the Society of Apothecaries, London.

The patient, in this case, it appears, died after a period of thirteen hours suffering, from internal hemorrhage in consequence of a rupture of the fallopian tube; when the following appearances presented themselves on examining the abdomen.

"The abdomen was slightly tumid; on cutting through its parretes, an abundant flow of bloody serum took place; and, from the most moderate calculation, three pints of this fluid must have escaped and been removed from the peritoneal cavity. Turning up the intestines, a large mass of coagulum of blood, at least two pounds, was found in the pelvis; which being withdrawn very cautiously, a gush of about an ounce of yellowish serous fluid escaped, appearing to come from a circumscribed cavity, &c. The thoracic organs were healthy; the heart loaded with fat, &c.

We now, says the author, directed our attention to the uterus, which was not larger than in the impregnated state. "As soon as it was dissected out, the source of the hemorrhage could be readily demonstrated, from a minute ulcerated opening in the back part of the fallopian tube, which was somewhat soft, a little enlarged, and of a livid colour. The point from whence the hæmorrhage proceeded being so satisfactory to the

gentlemen present, Mr. B. took home the uterus and appendages for more particular investigation, to which we refer such of our readers as may be desirous of perusing it, to p. 291, of the journal now before us, where they will find that a minute embryo, "certainly not larger than a small pearl-barley, was perfectly distinct, floating in its liquor animi," &c. &c.

Art. VI.—*Case of Male Twins united from the Axilla to the Spine of the Ilium.* Communicated by William Toms, Member of the Royal College of Surgeons, Licentiate of the Society of Apothecaries, &c.

The following uncommon case occurred some short time back in the neighbourhood of Kingsbridge, Devon.

"A woman was delivered of full-sized male twins, perfectly united from the axilla to the spine of the ilium, and facing each other; they weighed thirteen and a quarter pounds; measured from head to foot twenty inches, and ten inches across the hips; externally they were complete in every respect (excepting there being but one umbilicus) having four arms, four feet, &c. On dissection there was found to be but one heart, one spleen, one jegunum, and one pancreas.

The history of this case is simply as follows:—The patient (Joanna Masters,) a thin delicate woman, 36 years of age, residing at Balson, near the above-mentioned place, was taken in labour on Monday, the 9th of February last, at nine o'clock in the evening. A midwife was sent for, and arrived at half-past ten; at which time the motion of the children was distinctly felt. Pains still increasing, and the os uteri sufficiently dilated, the head was soon delivered; and, although the most violent labour-pains continued, she could not bring down the shoulders. In this state the patient was kept with the neck of the child completely wedged in the vagina, until a quarter of an hour after twelve, expecting each succeeding pain would bring away the child. The husband becoming much alarmed, Mr. W. Ilbert Pearse, the "friend and preceptor" of the author, was sent for, and arrived on the spot, from a distance of about four miles, at half-past one o'clock. This gentleman found the head, as previously described, completely delivered, with the neck tightly embraced in the vagina; the face and head much enlarged, discoloured, and distended with blood. He immediately gave the patient thirty drops of the tincture of opium, and, by dilating the soft parts with his fingers, gradually brought down the shoulders and arms. All difficulty was now supposed to be at an end, when, to his great astonishment, Mr. P. found, on further examination, a second child in utero, firmly adhering to the thorax and abdomen of the other, with the left leg presenting, which was immediately returned. "The size of the children, (says Mr. Jones,) being considerably larger than was possible to pass through the vagina, without laceration of the perinæum, or diminishing the bulk of the children, my attendance was requested, and a messenger dispatched for me, at the request of Mr. P., desiring I would also send a perforator, catheter, &c."

To be brief, Mr. Pearse found it indispensably necessary to perforate the chest and abdomen of the second child with his fingers, which considerably diminished their bulk; the legs of the first child were then delivered, the head of the second brought down, and delivery accomplished without the aid of any instrument, by desire of Mr. Pearse.

The placenta, a single one of the common size, with fuis smaller than usual, which adhered to the fundus uteri, was easily withdrawn by the introduction of the hand; very little hæmorrage ensued, and the womb contracted gradually; there was no

laceration of the perinæum, or soft parts.

The following mixture was ordered, and continued in, until she gradually recovered, viz.

Sperm. ceti, ℥ ij.
Ovi Vetellius unius.
Spirit. Æther. Nitr. ℥ iij.
Tinct. Opii, gr. xl.
Aquæ cinnam. ℥ iv. Fiat mistura capiat cochleare Magnum 4tis. horis.

The following circumstance, we are told, occurred during the fourth month of her pregnancy:

"A man, who gains his living by exhibiting two wax figures of children united together, (precisely in the same way to those she was delivered of) came to her house, and wished her to see them; but, being in the family-way, and having previously heard a full description of them from her neighbours, she considered them too frightful for her to view, and refused. She also received a severe blow in the abdomen about the same time from a fall, and never felt well from that period to her delivery. I am well aware these circumstances could not participate in uniting the children in utero, at her advanced stage of pregnancy; but merely mention it as a curious coincidence.

Coincidences of this description, it would appear, are by no means of rare occurrence; for instance, see our last number, page 2, and many others that could as easily be referred to, all of which are attributed to impressions, from external objects, made upon the imagination, &c.

The brain, chest, and lungs were examined; the latter, from their colour and buoyancy, turbid state of the pulmonary vessels, and contracted appearance of the ductus venosus, led to the supposition that the children must have breathed. They are preserved in their united state, and remain in the possession of Mr. Pearse.

Art. VIII.—*On Small-Pox, after Vaccination, as it occurred at Haverfordwest, in the Months of October and November last.* By Walter D. Jones, M. D. Fellow of the Royal Medical Society of Edinburgh.

Dr. Jones has only subjoined one case here, out of several that he has noted down, for the purpose, as he observes, of marking the mildness of the disease; and, as he would hope, to increase the faith of the medical world in the utility of vaccine inoculation, which has lately been much, though no less, in our opinion, unjustly, shaken. He, (Dr. J.) concludes by observing—

"There have been two cases of small-pox, within the last year, occurring *twice* in the same persons, near this place; and, if perfect immunity cannot be insured in all persons who have been inoculated for the small-pox, (and some of these have even had the disease a second time in the confluent form,) is it not safer to trust a substitute, which, in a very extensive proportion of instances, secures them permanently from a loathsome disease? while in those few (comparatively speaking) who, from a peculiarity of constitution, do receive the infection of the small-pox after vaccination, the morbid affection thereby produced is so far altered and modified, in its appearance and consequences, as to require little or no medical treatment.

Art. VIII.—*Case of Varioloid Eruption, occurring subsequent to Vaccination.* By R. Wade, Member of the College of Surgeons, and Apothecary to the Westminster General Dispensary.

This article partakes so much of the candour and sentiment of the preceding, that we shall merely quote Mr. Wade's question; viz. "It is worth enquiry whether one vaccine vesicle may be considered sufficient to secure the constitution from small-pox? I know that Mr. Carpue, Surgeon to the vaccine establishment, in Percy-street, is never satisfied with less than three; and, certainly, in the cases just related, the boy, who had but one vesicle, was the only one who had an eruption of any consequence; though even in him the constitutional symptoms were slight."

THE LONDON MEDICAL REPOSITORY, &c. (April 1st.) ORIGINAL COMMUNICATIONS.

Observations on Practical Pathology. No. X. Case of Acute Carditis terminating in Gangrene of the Heart: with Illustrations of the same Lesion determined by other Forms of Disease. By James Kennedy, M. D., of Glasgow.

Art. I.—All we have to say on this article, or rather this treatise, for it occupies no less than fifteen pages of the work before us, is, that Dr. Kennedy has quoted sufficient authority to convince the world he has not been an idle reader. His notes are copious; and the French Authors appear to be the basis on which he either founds or supports the pathology in question. We like Dr. K.'s definition of gangrene better than the whole of the pathology of carditis put together; we shall, therefore, try the taste of our readers with it, as an apology for some extracts of the article, essay, or treatise itself. Dr. K. observes that—

"Gangrene, in this essay, expresses the first stage of mortification: the former is a *specific*, the latter a *generic* term. Mortification is a kind of disease resulting from irregularity of vascular action, modified by that certain but undefinable peculiarity which distinguishes the gangrenous from every other form of the morbid state. It originates from that degenerative process, by which the natural heat and colour, the power of sensation and motion, all the attributes of organic vitality, become immediately extinguished. Experience recognises a dissimilarity in its symptomatic characters, which may authorize this being arranged into two discriminative kinds, implying reference to the nature of the malady and its progressive conditions. These kinds may be, 1st, mortification consecutive to inflammatory excitement, and may be named mortification from excessive vascular action; 2nd, mortification from partial or complete interception of the circulating fluids; in other words, from defective vascular action: it manifestly exhibits peculiar indications of treatment. Reason may also be found, in explaining the philosophy of mortification under either of these forms, to admit two successive stages in the gradations of its course. One of them is termed GANGRENE, and might be denominated *the stage of progression*, the phenomena of which announce the formation of the disease, its expansion, and perfect developement. By the epithet SPHACELUS the other is designated, and includes the *stage of consummation*. It is marked by absolute ascendancy of the gangrenous condition, with concomitant subversion of all the faculties of life in the morbid organ or texture, and its gradual disorganization by septic decomposition. When applied to an animated part, therefore, the term mortification is to be understood as expressing that part's vital extinction and structural dissolution, the act of its dying and the state of its being dead.

Dr. Kennedy's article, we regret, does not admit of any sufficiently comprehensive analysis compatible with the limits we ought in justice to bestow upon it; and this is the principal, if not the only reason, we are unwilling to entrench further upon its merits.

Art. II.—*Contributions to Pathology. No. IV. Cases in which Tumours of Cartilaginous Firmness were found in the Cerebellum.* By Joseph Ward, Esq. Member of the Royal College of Surgeons, and Apothecary to the London Hospital.

The existence of such tumours in the living subject, we much fear, must ever remain a matter of perfect speculation, until, as in the present instance, they are identified by *post mortem* examination: and were it even possible to detect them in the former state, medicine can have little if any effect on structural disorganization, particularly if an organ be important, and where the prognosis must be very obscure, as in this species of diseases of the brain.

Mr. Ward observes, in the two cases he has given, that he believes the patients were never, or only for a very short interval, *entirely* free from pain; and that the paroxysms were more or less violent than are usually observed in cases unattended by organic lesion. The paroxysms ne-

vertheless came on periodically, and were very well marked, particularly in the second case.

Art. III. *Cases of sudden Parturition.* Communicated by E. Tatham, Esq. Surgeon, Member of the Royal Medical Society of Edinburgh.

In the first case, Mr. Tatham was called out of church, about half past eleven o'clock, Dec. 14th, to attend Mrs.————, a clergyman's wife, then in labour, at the beginning of the ninth month of pregnancy.

On entering the room, observes Mr. T., I found all in commotion, and was told here were twins born; whereupon I proceeded to the bed-side of the patient (who appeared much agitated) tied the umbilical cords, gave the children to the nurse, and removed the placenta. Upon enquiring into particulars, I was informed that Mrs.———— was sitting in the parlour about eleven o'clock (all the family, except a servant, having gone to chapel,) when, not finding herself very well, she retired to her chamber, and feeling a considerable bearing down sensation, made use of the night-table. Suddenly she felt a great discharge of water, and immediately afterwards twins were born, which fell into the utensil, among the liquor amnii. An alarm was given, which brought up the servant, who, with additional assistance, placed the patient in bed, along with the children, taken out of the night table; after which I was sent for.

The author observes, that there is not the slightest reason to call in question the accuracy of this account. The twins were both male, but little; and though, says he, I have frequently seen as small live, they died within the week; and it is probable, their quick expulsion, and stay in the first situation for some time, contributed, in no trifling degree, to hasten their death.

"This case, continues the author, is curious, and, under certain circumstances, might have been attended with unpleasant results. 1st. Had the female made no alarm, but remained in the situation she was in at the time of labour, from exhaustion; and, after recovering, had she removed the placenta, and got into bed, placing the children, dead from lying in the liquor amnii, beside her, (which most probably would have been the case had there been no help;) how easily, under suspicious circumstances, would it have been supposed that respiration had been suppressed by the mother, and the death of the infants in that way caused. 2nd. As it was impossible to ascertain which of the boys came first, provided they had lived, and the oldest had been heir to a title and large estates, the greatest difficulty might have occurred under litigation. I mention here, too, that this lady had three children within ten months, as she was delivered of one about the end of February preceding.

The other case, although not exactly similar, is also a singular instance of sudden parturition.

IV. *Case of Fracture of the Cranium, &c.* By James Baker, Esq. Staines, Member of the Royal College of Surgeons, &c.

This case was the consequence of a kick from a horse, which produced considerable laceration of the integuments, with fracture and depression of the left parietal bone; and, upon prosecuting the examination, the dura mater was also found to be torn. The patient was trephined, under the usual symptoms, and two pieces of depressed bone raised, which were found to be entirely detached, and the two tables separated. As soon as the operation was completed, the lacerated integuments were brought in contact by means of two sutures, aided by adhesive straps, over which was applied an evaporating lotion. The accident occurred on the 14th of August; on the 10th day from this period two fungi cerebri arose: the larger one of the two encreased to the size of a small egg. "By the application of lint dipped in a mixture of rectified spirit of wine and water, in the proportion of ʒiv of the former to ʒxii of the latter, they gradually sloughed, and in three weeks entirely disappeared. On the 18th of October, the wound was perfectly healed; and the patient able to take exercise on horseback.

It appears the patient had been

trephined about two years ago, by Dr. Southern, and a portion of the frontal bone removed, for an accident of a similar kind,

V. *Cases in which Calculi were evacuated at the Umbilicus.* By Joshua Dixon, M. D. Whitehaven, (communicated by Mr. Edward Thompson.)

VI. *Cases in which the Sense of Hearing and the Faculty of Speech were lost simultaneously, and in which both returned, after many Years, without the Use of Medical Means, or any previous Change of Health.* By Edward Thompson, Esq., Whitehaven, Member of the Royal College of Surgeons, London.

This and the preceding cases are sufficiently interesting, but our limits prevent us from extending any portion of our columns to either of them for the present.

VII. Mr. Sprague's *Appendix to the London Pharmacopœia.*

(Continued from page 219.)

Ointments.—*Unguentum Antimonii Tartarizati.*

℞ Antimonii Tartarizati, ʒjss.
Adipis Præparatæ, ℥j
Balsami Peruviani * ℳx. M.
Fiat unguentum de quo illinatur regio epigastrica Nocte Maneque donec erumpantur papulæ.

Vel.

℞ Antimonii Tartarizati, ʒij.
Unguenti Cetacei, ʒix.
Sacchari Albi, ʒj
Hydrarg. Sulph. Rub. Gr. 5. Misce. Fiat unguentum.

Remarks.—The second formula is the ointment used by the late Dr. Jenner; the sugar preserves it from rancidity, and the vermillion is merely added to afford colour. The value of these ointments as external applications, for the purpose of exciting artificial eruptions on the skin, is now pretty generally known to the profession.

* The Balsam of Peru imparts an agreeable fragrant smell to the ointment, and preserves the lard from rancidity.

Unguentum Balsami Peruviani.

℞. Balsami Peruviani, ʒj
Unguenti Elemi Co. ʒvij.
Unguento balneo in aquoso liquefacto, adjice Balsamum Peruvianum et fiat unguentum.

"This is an excellent application to parts affected with gangrene, during the sloughing process, and in Phagedenic and ill-conditioned ulcers. It is also very serviceable when applied to obstinate broken chilblains, the parts being defended from cold by a prepared hare-skin."

Unguentum Cupri Acetatis. (*Form. Extempor. Vulgo Unguentum Æruginis.*)

℞ Cupri acetatis
Hydrargyri Protochlorid (calomel) ā ā ʒj.
Cerati Resinæ ℥j.
Terebinthinæ Vulgaris ℥ss.
Liquefac-Resinæ ceratum in Balneo aquoso, et Terebinthinam adjice; tunc cupri Acetatem et Hydrargyri Protochloridem (prius commistas) insperge, et omnia misce.

"This ointment is peculiarly adapted for the cure of that most obstinate of all the species of ringworm, called Porrigo Circinata, or alopæcia porriginosa of Sauvages, ringworm scall. This, says Dr. J. M. Good,* is one of the most common modifications of the disease, has been peculiarly frequent of late years, and has been found one of the most untractable. It has ordinarily made its appearance among children at school, but is not confined either to schools or to childhood; for I have at this moment a medical friend under my care, troubled with the same complaint, whose age is about 40. Mr. Wilson, in the Pharm. Chirurg., p. 211, observes, "The aggravated kind of ringworm, however, has resisted, under my care, all attempts at cure, except when treated with the unguentum Æruginis, which I have not yet seen fail." When

* See Good's Study of Medicine, Vol. IV. p. 633.

there is diseased sensibility of the part affected, we must endeavour to remove it by the following sedative lotion, before applying the ointment.

℞ Extracti Conii, ʒ ss.
Decocti Papaveris, ℥ xxij.
Spiritûs Rectificatis, ʒ ij. Misce.
Fiat pro fotu tepido, part. affect. nocte maneque applicando.

"In conducting the cure of this species of Porrigo by the preceding preparation of verdigrease, it is necessary that the scalp be kept closely shaven, and that the head be washed clean every night with soap and water, and afterwards with bran and water, and then rubbed perfectly dry. The ointment may be either applied on lint, thinly spread, or it may be rubbed on with the finger; an oil-skin cap should likewise be worn during the whole time the ointment is used."

Unguentum ad Porriginem Galeatam. (Banyer's)

℞ Hydrargyri Protochlorid. (Calomel) ʒ ij.
Aluminis exsiccat.
Plumbi *Subcarbonatis*, ā ā ʒ ss.
Terebinthinæ Venet. ʒ vj.
Cerati Cetacei, ʒ iss
Fiat unguentum.

"Mr. Sprague solicits the attention of the profession to this and the following ointment, for that disgusting and untractable disease of the scalp, Porrigo Galeata, or *Scald Head;* for which Dr. Parr, Professor Hamilton, and Dr. Bateman, recommend, as a very effectual application, Banyer's unguent. Dr. J. M. Good, in his Study of Medicine, Vol. IV. p. 632, observes, "Each has altered its composition in a slight degree; and the above form, which is more simple than any of the rest, is that which I have been in the habit of employing, with great success, for many years."

Unguentum ad Porriginem Galeatam (Dr. Chapman's.)

℞ Sulphuris sublimati.
Unguenti. Picis liquidæ ā ā ʒ jss
Saponis Mollis.
Ammoniæ Muriatis, ā ā ʒ ss.
Fiat unguentum.

"This ointment is strongly recommended by Dr. Chapman, as a remedy for the disease of the Scalp before mentioned. Mr. S. vouches for its efficacy, having, as he states, cured many cases by the use of it. The same directions as were given under the Unguent. Cupri Acetatis, will serve for the application of this and the former ointment."

LINIMENTS.—*Linimentum Ammoniæ cum oleo Terebinthinæ. (Formul. Extempor.)*

℞ Liquoris Ammoniæ, f. ʒ ss.
Olivæ olei, f, ʒ j.
Olei Terebinthinæ, f. ʒ ss.
—— Limonis. ʒ ss.
Agita Simul donec misceantur.

"This liniment will very frequently afford sudden and permanent relief in chronic rheumatism, lumbago, and sciatica."

Linimentum Anodynum.

℞ Linimenti saponis comp. ʒ j.
Liquoris Ammoniæ, ʒ iij.
Olei Caryophili, ʒ j.
Tincturæ Opii, ʒ ss. M. Fiat Liniment.

"A little of this liniment made warm, and rubbed over the surface of the abdomen, is excellent for allaying the pain of flatulent cholic, and relieving spasmodic affections of the stomach and bowels."

Linimentum Calcis.

℞ Olei Lini, ʒ ij.
Liquoris Calcis, ʒ vj.
Misce agitand. et fiat liniment.

"In cases of scalds and burns, where the cuticle has been destroyed, the part or parts should be kept covered with the liniment, spread upon fine old linen; taking care that the cloths on which it is applied are always in a state of moisture."

Linimentum Terebinthinæ Compositum.

℞ Olei Terebinthinæ, 0j.
Sinapis Seminum, ʒ ij.
Saponis Mollis, ʒ viij.
Aquæ Ferventis, 0j.
Seminibus contusis Aquam affunde, et macera per horas duas, dein liquorem le-

biter exprime. In hoc, solve saponem, adde oleum, et simul agita.

"This is recommended in the cure of chilblains, and in removing the effects of sprains, bruises, &c. after the inflammation has completely subsided; also, rubbed, night and morning, in the enlargement of the mesenteric glands in children.

Cataplasms.—The following is the summary method of making such compositions; and, with few exceptions, comprehend every thing of the kind required in practice.

"*Cataplasma Panis.*—This poultice is prepared with very little trouble, by merely soaking thin slices of bread in boiling water, and covering them down until they are swollen and perfectly soft. It is necessary to pour away, and even to press out, as much water as may appear to be superfluous, after which the bread may be beaten up with a spoon. This composition will be rendered still more complete, if a small quantity of *finely* powdered linseed-meal be stirred into it, which has the double advantage of binding its parts together, so that it shall not smear or cling to the skin, and of retaining for a much longer time that moisture, on the preservation of which its beneficial effects chiefly depend. I have so often experienced the correctness of Mr. Abernethy's opinion, in regard to the efficacy of this poultice, that I cannot but quote it here. Speaking of the cure of external inflammation, he says, "In many cases a bread and water poultice seems to me the best application we can employ, both with a view to abstract superfluous heat, and on account of its soothing qualities. It is, indeed, a local warm bath; and, like the bath, it induces a gentle perspiration from the surface." I consider bread as the most unexceptionable constituent for the formation of most cataplasms; and, in my opinion, it ought to have the preference to linseed-meal alone, oatmeal, or bran, so commonly used for this purpose.

"The poultice made with boiling dilute acetic acid, instead of water, is a simple, but effectual remedy, for sprains or bruises; and in such cases is best when applied cold. The same cataplasm *(lukewarm)* has been applied to ill-conditioned, irritable, and scrofulous ulcers, and leprous affections of the skin, with advantage. The lotio plumb. acet., mixed with bread, forms an excellent saturnine cataplasm.

"Carrots, *finely rasped*, and applied over the surface of the bread and water poultice, is the best form of making the cataplasma dauci; or, if preferred, it may be prepared by bruising fresh carrots, expressing the juice,* afterwards boiling them until they become quite soft, and mashing them up into a pulp, to which the previously-expressed juice is to be added: such a poultice has been found of much service in sweetening fœtid, ill-conditioned, and cancerous ulcers.

"Bread, soaked in boiling decoction of poppies, or the lotio opii, is usefully applied to parts in an irritable state, and in all external cases where it becomes an object to alleviate pain.

"Bread made into a poultice with the following lotion *(lukewarm)*, as recommended by Dr. Scudamore, is a soothing beneficial application to parts affected with gouty action.

℞ Misturæ Camphoræ, ℥ iij.
Spiritûs Rectificati, ℥ j. Misce.
Fiat Lotio pro Cataplasmate.

"The bread poultice made with portwine, forming the cataplasm. vini rubri, will be found peculiarly bene-

* Most persons make the carrot poultice by boiling the carrots without expressing the juice; but this should never be done, as on the retention of the latter its principal virtues depend.

ficial as an application in gangrene. Sir Astley Cooper relates a case of a girl who lately had a gangrenous sore on the pudenda, where a variety of applications having been tried without any beneficial result, the port wine poultice was at length applied: the immediate effects of which were so evident, that though her life had been despaired of, the last time Sir A. Cooper saw her the sore was brought into such a healthy state, that there were great hopes of her recovery. This cataplasm is also recommended by the same eminent surgeon, as the best local application to gangrene caused by injuring the toe in cutting corns."

ENEMAS. — *(Formul. Extempor.)* This is a class of very useful medicines, not included in the London Pharmacopœia, and for the composition of which it is very desirable to have some standard formulæ.

Enema Assafœtidæ, vel Fœtidum.

℞ Assafœtidæ Gummi Resinæ. ʒ ij.
Decocti Malvæ Composti. ℥ x.
Spiritûs Ammoniæ Composit. ʒ jss.
Tincturæ Opii, ʒ ss. Misce. pro Enemate.

"Dr. Paris observes, 'Assafœtida, in cases of flatulent cholic, has, in the form of enema, acted like a charm.'* The above is considered a proper combination, whereby the efficacy of the proper ingredients from whence the enema derives its name, is increased.

Enema Catharticum.

℞ Decocti Malvæ Composit. ℥ x.
Magnesiæ Sulphatis, ℥ j.
Olei Olivæ, f. ℥ ij. Misce. Fiat Enema.

This enema is well calculated for emptying the lower bowels, without stimulating them too forcibly.

Enema Colocynthidis Compositum.

℞ Colocynthidis Pulpæ Incisæ, ʒ j.
Aquæ Distillatæ, f. ℥ xij.
Coque paulisper, et cola; dein adde,
Sodæ Muriatis, ℥ j.
Syrupi Rhamni, f. ℥ j.

This stimulating purgative clyster will often be of considerable efficacy if administered in coma, stupor, and other affections of the brain analogous to apoplexy, or in those occurring from local injuries.

Enema Opiatum.

℞ Tincturæ Opii, f. ʒ j.
Mucil. Amyli, ℥ vj. Misce.
Fiat Enema, tepid. injiciend.

The starch rendered the retention of the clyster more certain, and thus the full action of the opium is better secured. This enema is often of considerable service in relieving pain of the rectum, from fistula in ano, or from hemorrhoids. It will generally relieve retention of urine depending on spasmodic stricture of the urethra; or, indeed, take off any spasm about the prostrate gland and neck of the bladder.

Enema Terebinthinæ.

℞ Terebinthinæ Vulgaris, ℥ j.
(vel Olei Terebinthinæ, f. ℥ ss.)
Ovi unius vitellum.
Tere simul, et gradatim adde,
Decocti Avenæ tepid. ℥ x.
Injiciatur pro Enemate semel in die, pro re nata.

This clyster is used with good effects in violent attacks from stone in the bladder: it has lately been much recommended for tetanus. When it is required to evacuate the lower bowels, ol. ricini, ʒj. will be found a useful addition.

IX.—*Cases in which Fumigation was successfully employed.* By Powell C. Blackett, Esq. Member of the College of Surgeons, and Surgeon Extraordinary to his Royal Highness the Duke of Clarence.

The cases here alluded to, successfully treated by sulphurous fumigation, were a cutaneous disease, partaking of the nature of psoriasis; syphylitic ulcers; scabies of the purulent and dry kind; derangement of the digestive organs, accompanied with indurations of the liver and erysipelas; prurigo senilis, &c.

* See Pharmacologia, 5th edit. Vol. II. p. 108.

"Time, (observes the author) has yet to shew the further importance of this great medical agent: its great usefulness for the relief and cure of many obstinate and painful diseases is daily becoming more apparent. Mr. Green,* an experienced practitioner, has devoted much attention to the subject; from his observations and practice more important facts may be expected, and certainly much remains yet to be developed.

Art. X.—*Case of Pemphigus Infantilis.* By G. C. Holmested, Esq. Braintree, Member of the Royal College of Surgeons.

This very rare and generally fatal disease attacked an infant on the sixth day after birth; it began by small vesicular pustules breaking out on the chest and body, and surrounded by an inflamed margin, which rapidly increased to large irregular and oblong vesications; the fluid contents of which were transparent at first, but as they enlarged, they assumed a purplish appearance, which afterwards turned to a turbid yellow. When the vesication broke, there appeared superficial ulcers, highly inflamed, of a deep scarlet colour, and much disposed to spread; they seemed very painful, as the child cried much when undressed. The spirit lotion was first frequently applied, in a tepid state, to the parts, for two days without any advantage. The disease increased, pustules arising on the labia pudendi, and between the nates.

"I therefore changed the application for a cerate, composed of lead plaster, chalk, vinegar, and oil, and punctured the vesicles early. The good effect of this practice was very soon perceptible: the large ulcers healed rapidly: and though fresh pustules appeared, as soon as they arose to a vesicle, I directed them to be punctured, which arrested their progress; one or two of these latter pustules, which were not punctured early, I could perceive rapidly to increase in size. By pursuing this plan for four or five days, and giving a few grains of the hydrarg. c. creta occasionally, so as to keep the bowels relaxed, the disease was removed."

* It is with pleasure that we add our testimony to the neat and commodious manner in which Mr. Green, (Bury-street, St. James's) has fitted up his fumigating baths; and, to speak of their merits, in a therapeutical point of view, would be an unnecessary repetition of Mr. Blackett's observations above quoted. EDIT.

REVIEW OF NEW BOOKS, &c.

RELIQUÆ DILUVIANÆ; *or Observations on the Organic Remains contained in Caves, Fissures, and Diluvial Gravel. By* Professor Buckland. *Murray, (Albemarle-street.)*

The reputation of Professor Buckland, as a geologist and antiquarian, is sufficient to recommend any of his productions to public notice, without further eulogy on their merits. The science of geology in this country may be said to have risen to that dignity only under his auspices, and has been reserved to him to produce to the world those indisputable evidences of an universal deluge, which sceptics only have required. Professor Buckland has been a large contributor to the Philosophical Transactions, and few persons have done more honor to the Royal Society, of which he is Fellow. He has travelled hand in hand with the no less illustrious Cuvier, the great French anatomist, physiologist, and geologist.

Professor Buckland considers that more than one convulsion of our planet has occurred, and he entirely coincides with Cuvier, in regard to the indications afforded by geology, of such second convulsion or recent transient inundation. He, therefore, considered himself justified in applying the epithet *diluvial* to the results of *the great convulsion*, of *antediluvial* to the state of things im-

mediately preceding it; and *postdiluvial* or *alluvial* to that which succeeded it, and has continued to the present time.

As he uses these distinctive phrases throughout his volume, it is necessary to premise thus much, in order to the perfect comprehension of his work. He has accompanied the descriptions of the various caves which he has discovered and visited with plates, principally the product of his own pencil, which, of course, much enhance the value of his labours.

The cave of Kirkdale is about 25 miles N. N. E. of the City of York, and situated at the lower extremity of Savage Beek-dale. The rock perforated by the cave is referable to the colite formation, and its organic remains identical with those of the Heddington quarries, near Oxford. On entering the cave, the first thing observed was mud or loam covering its whole bottom. At about 100 feet within the cave the sediment become more coarse and sandy, and partially encrusted with black manganese ore. On advancing some way into the cavern, the roof and sides were found partially studded with a coating of stalactite: thus far it resembled the stalactite of ordinary caverns; but, on tracing it downwards, to the surface of the mud, it was found to turn off at right angles, from the sides of the cave, and form above the mud *a plate or crust, shooting across like ice* on the surface of water, or cream on a pan of milk. It was chiefly in the lower part of the earthy sediment, and in the stalagmatic matter beneath it, that the animal remains were found. In the whole extent of the cave only a few large bones were found that were tolerably perfect; amongst them the thigh-bone of an elephant. The effect of loam and stalagmite in preserving the bones from decay was very remarkable.

The teeth and bones which have as yet been discovered in the cave at Kirkdale, are referable to the following species of animals:—

Hyæna, tyger, bear, wolf, fox, weasel, elephant, rhinoceros, hippopotamus, and horse; ox, and three species of deer, hare, rabbit, water-rat, and mouse; raven, pigeon, lark, duck, and a bird not ascertained, about the size of a thrush.

The bottom of the cave, on first removing the mud, was found to be strewed all over like a dog-kennel, from one end to the other, with hundreds of teeth and bones, or rather broken and splintered fragments of bones of all the animals above enumerated; they were found in greatest quantity near its mouth, simply because its area in this part was most capacious; those of the larger animals, elephant, rhinoceros, &c. were found co-extensively with all the rest, even in the inmost and smallest recesses. Scarcely a single bone has escaped fracture. On some of the bones marks may be traced, which, on applying one to the other, appear exactly to fit the form of the canine teeth of the hyæna that occur in the cave. The hyæna's bones have been broken, and apparently gnawed equally with those of the other animals. Heaps of small splinters and highly comminuted, yet angular fragments of bone mixed with teeth of all the varieties of animals above enumerated, lay in the bottom of the den occasionally adhering together by stalagmite, and forming, as has been before-mentioned, an osseous breccia. Not one skull is to be found entire; and it is so rare to find a large bone of any kind that has not been more or less broken, that there is no hope of obtaining materials for the construction of a single limb, and still less of an entire skeleton. Fragments of jaw-bones are by no means common; the greatest number I saw

belonged to the deer, hyæna, and water-rat, and retain their teeth; in all the jaws, both teeth and bone are in an equal state of high preservation, and show that their fracture has been the effect of violence, and not of natural decay. The greatest number of teeth are those of hyænas and the ruminantia. Mr. Gibson alone collected more than 300 canine teeth of the hyæna, which, at the least, must have belonged to 75 individuals; and adding to these the canine teeth I have seen in other collections, I cannot calculate the total number of hyænas of which there is evidence at less than 2 or 300.

(To be continued).

Observations on Acute Rheumatism, and its Metastasis to the Heart, &c. By Thomas Cox, M.D. Fellow of the Medical Society of London, Member of the Royal Medical Society of Edinburgh, and Honorary Member of the Physical Society, Guy's Hospital. (Cox and Son, St. Thomas's Street, pp. 65.)

This work is professedly written with a view to call the attention of the faculty to those symptoms of acute rheumatism which are commonly referred to metastasis; as well as to the connection between this disease and inflammation of the pericardium; and not, as the author very modestly observes, "with the idea of offering any thing new, but rather to elicit, from the more experienced, such facts and remarks connected with the subject as may be considered important." With these objects before him, Dr. Cox sets out by giving a brief though well connected pathological history, with the symptoms, causes, diagnosis, and treatment of rheumatics. Discussing separately as he (Dr. C.) proceeds, the comparative merits of each particular remedy; among which are enumerated,—blood-letting, purgatives, diaphoretics; including colchicum, opium, digitalis, cinchona, &c. The author next considers the phenomenon of metastasis: metastasis to the heart and brain, and its causes; and concludes by giving the dissection of some fatal interesting cases of this description, &c.

What Dr. Cox has said, with respect to acute rheumatism, &c. will be found to embrace some very useful practical suggestions; which must constitute a valuable acquisition to the fund of the general medical investigator of cause and effect. If we have any thing to regret in the perusal of this work, it is, that the author has not extended his observations much beyond their present limits.

Prison Labour, &c. — *Correspondence and Communications addressed to his Majesty's principal Secretary of State for the Home Department, concerning the Introduction of Tread-mills into Prisons, with other Matters connected with the Subject of Prison Discipline.* By Sir John Cox Hippesley, Bart. D.C.L. F.R. and A.S. a Bencher of the Inner Temple, pp. 228.

The contents of Sir John Cox Hippesley's work are specified in the title. Sir John, in common with, we believe, the majority of all who have bestowed a reflection on the subject, is no advocate for the tread-mill, as an instrument of prison labour, which, he well observes, "is, in fact, subversive of all manual labour, and cannot fail to paralyse every such effort as that now adverted to, contracted in the spirit and letter of the existing law, and productive of results, the great benefits of which have been generally recognised." The book generally abounds with much interesting discussion, in form of letters and affidavits from the several parts of the country where the tread-mill has been erected, on its various attributes, pro and con. It also contains a description of

the sketch of an improved hand-crank-mill, in the machinery of which, the principal objects have been to apportion the degree of labour to the degree of punishment, and, at the same time, to throw every muscle of the body into healthful action; advantages which the tread-mill by no means possesses. The crank-mill, since it was erected at the house of correction, *Devizes*, has received additional improvements, at the suggestion, and under the correction of Mr. *Millington*, professor of mechanics to the Royal Institution of Great Britain, and Surveyor of the County of Bedford, who also erected the tread-mill at this county gaol.

We have no room to enter upon the merits of any species of prison labour in preference to another; but, whoever may wish to read some excellent correspondence on this subject, from many eminent medical practitioners, and others, will be fully satisfied by referring to the work in question. We cannot, however, conclude these laconic observations, without remarking, that the motives and intentions by which the author is doubtless actuated, are founded on much rational justness of conception; the results of which are amply borne out and corroborated by strong additional testimony.

Dr. Hibbert's "Philosophy of Apparitions."

Dr. Hibbert has just published a popular and highly interesting work, entitled "Sketches of the Philosophy of Apparitions." This production was suggested by the interest that his paper on the same subject excited, when read during the course of the last winter, to the Royal Society of Edinburgh. As the volume only reached us as the present number was going to press, we have merely time to glance at the general plan of the work, which may perhaps best be described in Dr. Hibbert's own words. "In the first place," he observes, "a general view is given of the particular morbid affections with which the production of phantasms is often connected. Apparitions are likewise considered as nothing more than ideas, or the recollected images of the mind, which have been rendered more vivid than actual impressions." In a second part of this work, he says, "my object has been to point out, that in well-authenticated ghost stories of a supposed supernatural character, the ideas which are rendered so unduly intense as to induce spectral illusions, may be traced to such fantastical objects of prior belief as are incorporated in the various systems of superstition, which for ages have possessed the minds of the vulgar." In the succeeding, and by far the most considerable, part of this treatise, the research is of a novel kind. Since apparitions are ideas equalling or exceeding in vividness actual impressions, there ought to be some important and definite laws of the mind which have given rise to this undue degree of vividness. "It is therefore chiefly for the purpose of explaining such laws that the present dissertation is written. But I here enter into a perfectly new field of research, where far greater difficulties are to be encountered than I anticipated. The extent of them can indeed be only estimated by the metaphysician." The laws which govern the vividness of our feelings, Dr. Hibbert explains in the various transitions which the mind undergoes. 1st, From perfect sleep to the common state of watchfulness; 2dly, From the ordinary tranquil state of watchfulness to that extreme condition of mental excitement which is conceived to be necessary for the production of spectral illusions; 3dly, From perfect and imperfect sleep to dreams and somnambulism. These laws meet with very striking illustrations; which, the author adds, "are not more numerous than the treatise requires, as my object is not

only to render the principles which I have inculcated as intelligible as possible, but to direct the attention of the reader, less to the vulgar absurdities which are blended with ghost-stories, than to the important philosophical inferences which are frequently to be deduced from them. The subject of apparitions has, indeed, for centuries, occupied the attention of the learned; but seldom without reference to superstitious speculations. It is time, however, that these illusions should be viewed in a perfectly different light; for, if the conclusions to which I have arrived be correct, they are calculated more than almost every other class of mental phenomena, to throw considerable light upon certain important laws connected with the physiology of the human mind."

MEDICO-CHIRURGICAL VARIETIES, &c.

Peculiarity in the Formation of the Teeth in the Guinea-Pig. By M. Em. Rosseau, D. M. P.

In a letter addressed to the *Académie Royale de Médecine* of Paris, M. Rosseau relates that he had noticed the guinea-pig lose its first molaris four or five days before its birth, which was absorbed in the uterus of the dam, whence the fœtus was expelled with its teeth sufficiently formed to enable it to nibble immediately.—*Bullet. des Scienc. de la Société. Philomat. Oct.* 1823.

Case of Oblongation of the Uvula producing Symptoms analogous to those of Chronic Pneumonia. By M. Cuynat, Chirurgien-Major, &c.

A female, thirty years of age, born of healthy parents, and possessed herself of a healthy constitution, who had contracted a cough, from frequent exposure to vicissitudes of temperature, after a year's suffering, presented the following symptoms, notwithstanding the "use of the most *heroic* and the most varied means which were considered proper for retarding the progress of a severe disorganization of the parenchyma of the lungs. The respiration was oppressed; a considerable constriction of the thorax existed; and acute, lancinating, and fugacious pains, increased on coughing and on full inspiration, were felt in that cavity; the patient was continually attempting to swallow or to hawk up mucus from the throat; a fixed pain, accompanied with tickling, existed in the larynx; the appetite was almost null; the tongue was sometimes white, and sometimes in a natural condition; her pale countenance, extreme emaciation, depressed condition, both moral and physical, seemed, however, to indicate the profound lesion of some important organ; the chest, carefully explored, resounded very well in every part, except at the upper portion, where the sound seemed a little dull; the pulse was sometimes small, unequal, and at other times frequent and full, and frequently changed in less than half an hour to one or other of these conditions."

M. Cuynat, on examining the fauces, found the uvula elongated, loose on the base of the tongue, and distended with serous fluid. It occurred to him that all the symptoms experienced by the patient were occasioned by the elongation of this appendix. All internal treatment was discontinued, and the superabundant portion of the uvula was cut off. Fifteen days had scarcely elapsed before all the symptoms previously indicated had ceased: the patient was soon completely restored to health. —*Revue Médicale*, Tom. II. p. 353, and *Journal Général de Médecine*, *Dec.* 1823.

Case of Cancer of the Stomach.

with Perforation of the Vena Porta. By M. Casimir Broussais.

A non-commissoned officer, aged fifty-one, of a lymphatic temperament, was admitted into the Military Hospital of Val-de-Grace, labouring under diarrhœa, which had continued for six months. He was emaciated and very pale; the extremities were cold; and there was an evident tumefaction in the epigastric region.

Under an amylaceous regimen, he gradually improved for about twenty days, at the expiration of which time he was attacked with constipation, meteorismus, frequency of the pulse, heat of the skin, and shivering. Death soon supervened.

Dissection.—Much serous fluid was found in the abdomen, whilst the stomach, omentum hepato gastricum, pancreas, the commencement of the duodenum, the subjacent cellular tissue, and the vena porta, were conglomerated into one mass: the cavity of the stomach, filled with black blood, towards the pylorus presented a carcinomatous affection four inches in diameter, in the centre of which was an ulceration leading into the vena porta, by which unquestionably the accumulated blood had been supplied.—*Bull. de Société. Philomat. Sept.* 1823, *p.* 156.

Examination of a Body soon after Parturition.—In October last the body of a female, apparently about the age of thirty, was brought into Mr. Mayo's dissecting room: it was fat and muscular, not in any ways misshapen, and somewhat about the middle height of women. This person appeared to have died of uterine hemorrhage, a short time after delivery at the full period, for the uterus was very capacious, its substance 6-10ths of an inch in thickness, its orifice open, and, when disposed in a circular form, about two inches in diameter. Both the uterus and vagina contained a quantity of clotted blood. The inner surface of the uterus was thinly covered with shaggy processes of flocculent membrane, and appeared abraded here and there, and when the part was injected with size and vermilion, the injection escaped into the cavity of the womb, through many small orifices on its inner surface.

The muscles of the abdomen were found to have their usual appearance, except that the recti were between four and five inches asunder.

It was ascertained that the upper part of the vagina, where it joins the uterus, could be readily exposed without injury to the peritoneum, after an oblique incision through the fore part of the abdominal parietes.

The pelvis was well formed, and of the usual dimensions; but it was found that the sacro-iliac joint on either side was loose, so that the ilium and sacrum could be separated on each side to the extent of a third of an inch on the fore part of the joint. The ligamentous fibres, which run across from the ilium to the sacrum, were entire; but the usual connecting medium within, between the bony surfaces, was dissolved.

The symphysis of the pubes had been cut through before the condition of the sacro-iliac joint had been noticed. The sacro-sciatic ligaments were very lax. *Mayo's Anat. and Phys. Comment. No.* II. *p.* 46.

Case of Hypertrophy of the Heart.—M. Chomel, at a late sitting of the *Académie de Médecine* of Paris, presented the heart of a man who had died at the *Hôpital de la Charité.* The parietes of the right ventricle shewed such a hypertrophy, that its cavity was almost extinct. The orifice of the pulmonary artery was so considerably contracted, that it could not admit the extremity of the little finger. In the remainder of its ex-

tent, the pulmonary artery was of its usual diameter. The other cavities of the heart had preserved their natural proportion. The patient had laboured under the ordinary symptoms of aneurism. There was every reason to believe, that, in this individual, who was quite young, the extreme narrowness of the opening, between the right ventricle and the pulmonary artery, was congenital, and that it favoured the developement of the hypertrophy of the right ventricle. *Archives Générales de Méd. Septembre*, 1823.

Extensive Ovarial Disease.—M. Gaillot has lately communicated a case of tumour of the ovary to the *Académie Royale de Médecine*, which was of a cartilaginous consistence, and weighed fifty-six pounds. The patient had been afflicted with this tumour for seventeen years, without the health being much disordered, or the menstruation at all deranged. She died, at the age of forty-two years, of peritonitis.

Employment of the Oil of Turpentine in Sciatic Neuralgia.—Mons. Laroche has administered the oil of turpentine, in the dose of a dram to an ounce of syrup, in neuralgia sciatica. In several patients the cure was speedy and complete: in others a relapse occurred. All experienced relief. In some a copious sweat preceded the disappearance of the neuralgia. Slight dyspnœa and epigastralgia are said to have been occasionally produced by it.—*Revue Médicale, Oct.* 1823.

Persian Opium.—Persia is the very land of medicinal drugs. The poppy grows there in great abundance, and nowhere does it afford so potent or so plentiful a juice; hence the excellence of Persian opium, by the natives termed *afé-oon* or *abé-oon*, whence our name for it is derived. It is ripe in June: the juice is extracted by incisions made into the head of the plant; thence exudes a viscous humour, which is collected at day-light, before the sun shines on the poppies; and so strong is the effluvium, that the gatherers are sallow, meagre, and palsied. Effects nearly similar are suffered by those who dress and prepare the juice. Bakers scatter poppy-seeds in the bread, as an incitement to sleep, which the Persians consider as very salutary after meals. They find the poppy-extract productive of pleasant dreams, and of a sort of enchantment. The drug's influence is perceived after the lapse of an hour, and lasts for several hours, according to the strength of the dose. This, however, is succeeded by numbness over the whole frame.—*Letters from the Caucasus and Georgia.*

Sciatica.—Dr. Martinet, of Paris, has published a treatise on the use of oil of turpentine in Sciatica, and similar disorders of the limbs. It contains a number of experiments, exhibiting the advantageous effects of that essential oil. The result is, that of thirty-six persons affected with sciatica and similar disorders, whether acute or chronic, twenty-six were completely cured by the application of oil of turpentine, seven received great relief, and in only three cases was it inoperative. The average length of time during which it was found necessary to persevere in the application of this remedy was only six days; and it seems to deserve the attention of other medical practitioners.

Cholera Morbus.—The plague, called also Cholera Morbus, and which, in 1817, appeared for the first time on the banks of the Ganges, reached, in 1821, the shores of the Persian Gulf. In 1822 it spread into Persia, and entered Syria, by means of the caravans from Bassora. In the month of June last it

mounted to Antioch, and extended to the shores of the Mediterranean, where it came in contact with the European merchants. The report that it has made its appearance in the Isle of Cyprus and in Lower Egypt, is groundless; but there is reason to fear that it will be introduced into the latter country during the approaching spring, especially if it should reach Damas before the cold season arrests its ravages. It is not known whether or not it has penetrated into Alexandria; the last intelligence merely states that it has already desolated the shores of the gulf on which that city is situated; and that the terror which it inspired had caused the flight of the greater part of the population.

Mr. Editor,—Reading in the last number of your Medico-Chirurgical Review, an extract from an essay on the nerves and the lining membrane of the teeth when denuded, by a doctor of medicine and surgery of the University of Erlangen, I have been induced to send you the following observations:—

The vitality of the teeth is considered to depend on the existence of their vessels, as their sensibility naturally does on the existence of their nerves; thus, when the vessels and nerves entering the roots of a tooth are destroyed, that tooth can possess neither sensibility nor vitality; but, although deprived of life, I do not imagine that it is by any means an useless or intrusive part in the animal economy. I could adduce several instances where, after the nerve of a tooth has been destroyed, that same tooth has remained for years firm in its sockets, and undergoing only a slight degree of discolouration.

The use of the actual cautery I have ever found intolerably painful, and scarcely able to be borne, and here I will mention an instance of its use, occurring under my own eye, productive of serious consequences.

About the end of December, in the year 1822, a poor woman was brought into the Hotel Dieu, Paris, under the following circumstances. Being dreadfully afflicted with tooth-ache, and not wishing to lose her tooth, she applied to a chemist for something to mitigate the pain. A man in the shop having heard that the actual cautery was a sure remedy for it, heated an iron and thrust it into the interior of the painful tooth. The woman possibly might have been of an irritable constitution; she went out in the air, and caught cold; before night, inflammation was rapidly coming on, and, by the next day, the face and cheeks were swollen to a considerable extent; the woman was consequently compelled to keep her room; still the symptoms did not abate. The swelling continued to increase; her eyes were scarcely perceptible; her articulation could not be distinguished; her face was nearly double its natural size; and, altogether, she exhibited a most shocking sight; nor was it until a very considerable time after she entered the hospital, that her recovery was certain.

This circumstance shows the great liability there is to inflammation if we trifle with the nerves in the interior of the teeth. I have myself, where the preservation of a tooth has been indispensably requisite, frequently applied the actual cautery, but have always been apprehensive of bad consequences. Many French dentists resort to it whenever they find the least sensibility in a tooth, and they generally find that it hardens the tender part. When a decay is so far advanced as nearly to expose a tooth's cavity, it is then impossible to stop up that tooth with metal, on account of the pain and in-

flammation that the pressure on the nerve would occasion; but, by the insertion of a heated iron into the cavity of the decay, if properly applied, the sensibility is greatly diminished. Actuated by what I have mentioned, many continental, as well as British dentists, have imagined that when a decay of a serious nature occurred in the crown of a tooth, in the lower jaw, melted gold or lead introduced into the cavity would not only, if pain existed, alleviate it, but, by the cavity being, as decays in general are, much larger in the interior, remain permanent a considerable time in the tooth.

This plan being altogether new was much adopted, but the very great success with which the late Mr. Waite, of Old Burlington-street, performed this operation, the usual way, got the melted metal into disrepute. Many patients suffered greatly from severe burns, and many objections were raised which condemned the operation, although the idea was reckoned good.

Numberless facts connected with the teeth are still in obscurity, nor have we many interesting works published on them, except those of Fox and Blake, John Hunter's being the general standard.

It appears to me very ironical, that out of so many dentists who get into such great reputation at the west end of the town, we do not find some who endeavour to contribute a little towards the general stock of useful information. The extracts you have given from Mr. Koecker's work appear to be founded on scientific principles, and as so few dentists in our metropolis can favour us with their knowledge, let us return him all the credit due to his endeavours.

By inserting the above observations, you will greatly oblige a well-wisher to your valuable magazine.

W. G.

March 25, 1824.

CHEMICO-PHILOSOPHICAL MISCELLANY, &c. &c.

WATERTON *on preserving the Skins of Birds, Beasts, and other Animals; and the Bill of the Toucan.*

On Preserving Birds.—1. When the bird is shot, take it up by the legs; by which means the blood will not run through the feathers, but be detained by the reversed position of them: should, however, any run, scrape it off carefully with a penknife, when half clotted; then lay the bird in a cool place, to stiffen.

2. Wash the feathers clean with water, should any of them be dirty: observing to keep rubbing them downwards with the fingers, whilst drying, to prevent them from sticking together.

3. In skinning the bird, place it upon a towel laid on the knee. Be provided with a sharp penknife, having a lancet-shaped point; also several small needles or sharp wires; with thread; raw or *uncarded* cotton, for stuffing; wooden skewers, for clearing out; glovers' or surgeons' crooked needles, for closing the orifices; and, lastly, a mixture of a tablespoonful of corrosive sublimate (chloride of mercury) in a quart of rum or other proof spirit, which should be allowed to stand all night, and poured off from the undissolved part next morning. Then open the skin of the belly of the bird, from the breast-bone to the vent; carefully stopping every aperture with cotton, in order to absorb any fluids which may escape during the operation; and, particularly, observing first to stuff the beak and nostrils with cotton. Skin the bird, by blowing aside

the feathers, and making an incision with the knife from the breast-bone to the vent: the skin may then be separated on each side with the knife; always filling up with fresh cotton, as before directed, until you reach the thighs: then sever the joints of the legs from the thighs; and either take out the thighs, or cut through the joints. Then separate or divide the back-bone from the rump: and proceed, by drawing out the body: cut the joints of the thigh-bones from the body, and also cut away the shoulder-bones from the breast.

Other particular Directions.—Make use of the knife, at the ears—only cut through the middle of the skin at the eyes, with the edge of the knife turned upwards. Leave the scalp and jaw-bones adhering to the skin. Rub the top of the scalf with the antiseptic mixture. Let cotton be introduced between the scalp and the skin on the top of the head, to loosen and separate it. Separate the body entirely from the skin. Clean the wing and thigh-bones; wrap them round with eotton, and touch them with the mixture. Take out the rump. Touch the inside with the mixture applied upon cotton, wrapped over and between a cleft stiek, which is stuck through the cork of the bottle. Sew up the body, and stuff it with cotton. Apply the mixture, by means of the cottoned skewer, inside the mouth, nostrils, &e. Clean the eyes and mouth. Fasten the upper and lower beak, with a needle and thread. If the thigh-bone is broken, unite it, by putting a needle, wire, or skewer, inside of it.

To shape the Bird.—Stick one end of a needle underneath and into the beak, and at the other end affix a cork; place the bird in a deep box or case containing eotton; so that the cork which supports the beak may rest on the ledge of the box, whilst the body, wings, tail, &c. may be supported and sustained in any required position, by packing the cotton aceordingly beneath them. Whilst drying, the feathers may be displayed to the utmost advantage, from time to time, at pleasnre; and the feet brought to shape, and punctures made in their solid parts, to which a little of the solution may be applied. The head may be stuffed into the natural shape, through the orifices of the eyes; and wires inserted into the feet, to attach the bird to a branch, &c.; but the wires are not required anywhere else. The bird will thus retain the shape given to it when dry.

To kill a Bird, without injuring it Feathers.—Raise the wings from behind, with the fingers and thumb of the left-hand; and, with those of the right-hand, press that part of the body close adjoining to and underneath the wings, as hard as possible: this pressure will exert an aetion upon the heart, and cause the death of the bird instantly.

(To be continued.)

Mr. Perkins's Steam Guns.—The great power of Mr. Perkins's engine he has recently illustrated by some singular experiments. He has constrneted a small apparatus, which, when conneeted with the generator, has been found to discharge ordinary musket-bullets at the rate of 240 in the minute, and with such tremendous foree, that after passing through an inch deal, the ball, in striking against an iron-target, became flattened on one side, and squeezed out. The original size of the bullets was 0·65 of an inch, but after striking the target, they were plano-convex, and their diameter 1·070 inches, and 0·29 of an inch thick.

On the Nature of the Atmosphere of Seas.—In a curious paper on this subject, published by M. Vogel

Munich, in the *Journal de Pharmacie*, No. 11., for November 1823, p. 501, 506, this learned chemist has given the following results: 1. That the air of the Channel between Dieppe and Havre contains muriates. 2. That the air of the Channel, as well as the air of the Baltic, contains a less quantity of carbonic acid than the air of the Continent. 3. That the muriates do not disengage their acid, at a temperature capable of bringing them to ebullition, but that they are partly volatilised with the vapours of the water. 4. That there is no particular colouring principle in sea-air, as M. Hermbstaedt of Berlin thought; and that the red colour produced by nitrate of silver with the aid of the sun, is due rather to the muriates. 5. That all water whatever, which contains traces of a muriate, possesses the property of acquiring a wine-red colour with nitrate of silver, when exposed to the sun.

Pompeii and Vesuvius.—"*Albergo Vittoria, 8th Feb.* 1824.—About 50 miles from this place are the ruins of three temples, standing together on the sea-shore, at a place called Pæstum. We made up a party last week, and drove out to these ruins. It was cold clear weather, and the Apennines were covered with snow, but a more interesting trip we never made. The ruins are the most magnificent in Italy; particularly what is called the Temple of Neptune, with fourteen large Doric pillars in length, and eight in the other direction. Farther than these ruins, and the wall of the town, not a vestige of it remains; and, what is very singular, scarce a notice now exists of any account of the town, though it must have been a very considerable maritime place. Like most of the other places on that coast, it must have been a Greek settlement; but times, alas! have changed sadly with it; for now three solitary farm-houses are all that remain, owing to its being unhealthy in summer.—There is something very incomprehensible about the unhealthiness of towns in Italy; for the town of Salerno, situated on a beautiful bay, which we passed along, is almost deserted by its inhabitants in summer; and yet they find safety at another small town, similarly situated, and not a mile from it. In returning to Naples, on the third day, we stopped at a large sandy-looking bank, on the right side of the road, about ten miles from town. The bank was that which destroyed Pompeii, A. D. 79, and we were now at the walls of that city. There are few things so strange as a walk through the silent streets of a town, which, for 1700 years, has been hid from the light of day and the world, when the manners and every-day scenes of so remote an age stand revealed, unchanged, after so long an interval. It would appear, that, sixteen years before the shower of sand and ashes from Vesuvius occurred, an earthquake had nearly ruined the town; so that the houses are roofless, partly from that cause, and from the weight of the ashes which fell; otherwise, they stand just as they were left. The streets are narrow, but paved; and the mark of the carriage-wheels in the lava pavement is evident. In Murat's time, 4000 men were employed in excavating; and so a great number of houses, perhaps one-third of the town, have been uncovered; but, at present, there are only eleven men and a few boys at work. I fancy the Neapolitans find the expence of giving 20,000 Austrian troops double pay a little troublesome; and so excavations must stand over for the present. The houses were all small, generally of two stories, but beauti-

fully painted; and the figures of animals, such as horses, peacocks, &c. are as bright as that day they were painted. There are two theatres standing, and one amphitheatre, all nearly perfect; but I find it impossible to give you any idea of the wonders we saw in one walk through Pompeii. At one time, we walked up a street called the *Strada dei Mercantis*. On either side of us, the shops of Mosaic sellers, statuaries, bakers, &c. &c. with the owners' names painted in red, and the sign of his shop rudely carved above the door. The mill in the baker's shop, and the oven, amused us much. At another time we passed through the Hall of Justice, the Temple of Hercules, the Villa of Cicero, and the Villa of Sallust. The only villa of three stories I observed, belonged to a man called Arrius Diomedes, (his name was at the side of the door;) and, in the cellar, beside some jars for wine, still standing, was the skeleton of this poor fellow found, with a purse in one hand, and some trinkets in his left, followed by another, bearing up some silver and bronze vases, the last supposed to have been his servant. They had been trying to escape, by taking refuge in the cellar. Many other curious things have been discovered here, and a great deal may yet be brought to light; for, from a ticket of a sale stuck up on the wall of a house, it would appear that one person had no fewer than 900 shops to let. The street of the tombs is the most impressive: they are beautiful and extremely interesting. One for the gladiators has a representation of the different modes of fighting carved on it; and, from this it would seem, that they occasionally fought *on horseback;* which, before the discovery of Pompeii, was unknown. Here, however, I must stop, and leave you to hear more about the matter from my journal, which is very full.

On the 6th of this month, we made out our visit to the top of *Vesuvius*. The ascent and descent along the lavas take about five hours. We had very fortunately Salvadori for our guide, who told us all about the different eruptions, &c. &c. The crater is not at all the thing I expected, but a gulph of most immense size, and one can see to the very bottom of it. I can scarcely believe what we were told, that it is $4\frac{1}{2}$ miles round the crater, and that its depth is 2000 feet; but it is a most horrid magnificent sight. Here and there a quantity of smoke is seen curling up the rocky sides; but at present the mountain is very quiet. All around is a dark, black-looking waste of lavas, extending to the sea; and, near the foot, are the vineyards of the Lachryma Christi. In spite of the sad examples of Herculaneum and Pompeii, villages are sprinkled here and there, at the very foot of the mountain; and our guide told us, that one of them, called Torre del Greco, had now been destroyed fourteen different times, and another seven. The day was very clear and beautiful, and the view very fine. The country round Naples, towards the hills, is so rich and productive, that it is called the Campagna Felice; but still the people are poor and miserable.

Effects of an Earthquake on the Vegetation of Wheat.—It is a remarkable circumstance, that, since the great earthquake of 1687, no wheat will grow on the coast of Peru. In some places, indeed, a little is raised, but it is very unproductive. Rice, on the contrary, yields a great return. Before the earthquake, one grain of wheat yielded 200 grains.

New Pyrophorus of Tartrate of Lead.—In determining the composition of tartrate of lead, Dr. Friedmann Gobel of Jena observed, that this salt, when heated in a glass tube, formed a fine pyrophorus. When a portion of the deep brown mass is projected from the tube, it instantly takes fire, and brilliant globules of metallic lead appear on the surface of the substance in ignition. The effect continues much longer than in other pyrophori.

Precipitation of Metals by Galvanic Electricity, and its Use in the Arts.

Sir,—The great defect of brass and steel, as well as silver, for the use of philosophical and optical instruments, in consequence of what is called tarnishing, (oxidation) is a subject of universal complaint amongst opticians. All those instruments, which are intended for hot climates, are most subject to this defect, particularly on the sea; it must, therefore, be a matter of great importance to gentlemen and persons in the habitual use of such, to have them as little as possible liable to that inconvenience. The great price of gold and platina, the two commonest metals not subject to oxidation, prevents their general application, although platina might be much more generally used, and the price would not be a serious obstacle, if its valuable properties of not tarnishing and being infusible were better known amongst mechanics. Under these circumstances, any information likely to facilitate or do away the inconvenience above-mentioned must be of some importance to scientific men, as well as of value to the manufacturer of philosophical and optical instruments.

The precipitation of metals by galvanic electricity has occupied but very little of the attention of the higher chemists, but what investigations are already before the public, cannot fail to excite in us an idea of their great utility.

Fully impressed with this notion, I instituted a set of experiments to throw some light upon the subject, with my attention chiefly directed towards a means of giving one metal a coating with another, in order to apply them to philosophical and optical purposes.

I found that I could readily precipitate most metals upon each other, by *consulting their power of oxidation. Any metal in solution may be precipitated upon another metal by the intervention of a third metal, more oxydizable than either.*

Thus, into a saturated solution of platinum, *entirely free from excess of acid*, and diluted with an equal quantity of water, immerse a slip of polished copper, and a slip of polished iron, so that the ends of the two slips of metal may come into contact with each other — an action will speedily commence on the iron, and a galvanic circuit will be formed. The electrical state of the metals will be changed, and the platinum deposited on the copper, in a metallic form, and not as it would have been without the intervention of the slip of copper in the state of black powder or oxide. If this experiment be properly conducted, the copper may be burnished or polished, and will have all the appearance of platinum.

As copper is the metal most commonly used in the arts, I continued my experiments on it, aware, that if I obtained any favourable results, they would be so much the more serviceable to the arts. Considering that silver was liable to the imperfection complained of, and that it was already very extensively applied by plating, I turned my attention to *Nickel*, a metallic substance, the valuable properties of which, like platinum, need

only be better known to be better appreciated.

Into a saturated solution of crystalized sulphate of nickel, entirely free from excess of acid, I immersed two polished plates of metal, one of iron, the other of copper, with their lower ends in contact. As soon as an action commenced, the phenomena of the former experiment appeared, and the copper was plated with nickel, which might be polished or burnished, as before observed.

There are several circumstances which require attention to obtain perfect success, which I shall briefly state.

In the first place, *there must on no account be an excess of acid—and the solution should always be sufficiently diluted.* Secondly, the slips of metal used should be as *highly polished as possible*, and the plated metal should be withdrawn from the solution as soon as ever the coating is complete, and well washed in cold water, and exposed to a temperature of 150° Fahrenheit. This should be strictly attended to, because a reaction in many instances takes place, particularly when the slips of metal employed are both more oxidizable than the one in solution, as in the instance of the first experiment. Either of the slips of metal alone would decompose the solution of platinum, and, therefore, each is (though *not equally)* liable to be dissolved. The slip of iron being much more readily acted upon than the slip of copper, as the iron robs the solution of platinum of its acid, the equivalent of platinum to that of the iron dissolved is precipitated on the copper, which has not yet undergone any change; but if it were suffered to remain in the solution for a longer period, it would also be acted on, and its surface would be oxidized or corroded, instead of being plated with metal.

It is my intention, at a future period, to pursue those inquiries.

Yours, &c. N. Mill.

March 28, 1824.

Test-Paper for Acids, Alkalies, and Compound Salts.

A useful test-paper has been submitted to the Society of Arts of London, by Mr. Thomas Griffiths. Acids change the blue colour of the test-paper into red, and alkalies change it into green. It is thus prepared. A pound of the minced leaves of red cabbage are boiled in a pint of distilled water, till all the blue colour is extracted. The liquor is then strained through a cloth or sieve, and the clear infusion, which is of a fine blue colour, is to be evaporated to half its bulk, and poured into a shallow dish. The paper may then be dipped into it, and hung on lines to dry. A sheet of the filtering paper, which is the kind used, absorbs two fluid ounces of the infusion. With this test-paper, only one drop of the solution to be boiled is required. There are, no doubt, several processes, in which a test for acid and alkali at one operation may be found advantageous. See the *Transactions of the Society of Arts for* 1823, vol. xli. p. 78.

NUISANCES,

Subject to Medical and Chemical Investigation, extracted from Paris *and* Fonblanque's *Work on Medical Jurisprudence.*

The nuisances here in question are those which are directly or indirectly detrimental to health, whether general or individual, destructive to comfort, injurious to property, obstructions to the free course of light, air, water, &c.

"The question, how far the salubrity of the atmosphere may be affected by the effluvia of particular manufactories, is one that the medical practitioner is often called upon to decide; and, upon such an occasion, let him beware that his judgment be

not swayed by the fastidiousness of the surrounding inhabitants, nor warped by the clamours of invidious rivals or interested opponents; as a man of science and integrity he is called upon to decide between two parties, equally valuable to the state —between the health and comfort of the citizen, and the prosperity of the manufacturer."

The manufactories which have been considered exceptionable are arranged under four heads: — 1st, Those extricating gaseous effluvia, the products of *putrefaction or fermentation*, as flax-steeping, cat-gut manufacture, slaughter-houses, tanneries, skinners, fell-mongers, curriers, &c. 2d, Those where fire is the agent of extrication, as brewing, distilling acids, incineration of animal substances, glue-making, horn-roasting, soap-boiling, gas-making, &c. 3d, Those which yield waste liquids, that taint the neighbouring streams, as gas-works, dyeing-houses, &c. 4th, Noisy trades, as coppersmiths, anchor-makers, goldbeaters, tinmen, &c. &c. We shall here introduce the observations of our authors entire, on this curious and interesting subject. They are in the best stile of our authors, and they combine entertainment with instruction.

"On the manufactures and occupations above alluded to, we have to make the following observations:—

"(1) As the vegetable matter undergoes the putrefactive process in stagnant pools, the effluvia which arise are necessarily highly pernicious; while the waters become so poisonous as to destroy the fish contained in them, as well as to prove injurious to cattle that drink of them. In Italy, the process of steeping flax or hemp is only permitted at the distance of some leagues from a town. Zimmerman tells us, that the effluvia from this source have been known to occasion a malignant fever, which proved fatal to the family in which it first began, and afterwards spread its contagion through a whole country. Lancisi observes, that dangerous fevers are often prevalent at Constantinople, which owe their source to the hemp brought from Cairo, and which is put wet into the public granaries, and suffered to ferment during the summer. At Helmstedt there is annually in the autumn, when the flax is steeped in the Aller, an epidemic dysentery that prevails for several weeks.

"(2) The manufacture of starch can scarcely be considered, in itself, a nuisance, for, although it be necessary to produce the acetous fermentation, in order to remove from the fecula any colouring matter, yet, if sufficient attention be paid to the operation, and the water be properly let off from the settling-vessels, no inconvenience can arise. A nuisance, however, of considerable magnitude may incidentally attend these manufactories, from the number of swine which are constantly kept by the starch-maker, and the profit of which forms a part of his speculation, and which is so considerable that he can generally afford to sell the starch at prime cost, relying wholly upon the former trade for his profits.

"(3) The process of tanning involves several operations of a very nauseous description; the hides, for example, undergo incipient putrefaction, in order to loosen the epidermis, and to render the hair and other extraneous matter easy of separation from the true skin.

"(4) The peregrinations and vicissitudes of fate to which the horse is doomed during life, has repeatedly furnished subjects of reflection; but few are aware to how many economical purposes his carcase is converted after death, and to how many noisome processes it gives rise. The dealers in dead horses, or *nackers*, as they are termed, begin their mercantile anatomy by taking off the shoes

and disposing of them to the farrier; the skin is next stripped off, and sold to the tanner; the carcase is then cut into pieces, and boiled in large cauldrons of water, in order to extract the fatty matter, which, being skimmed off from the surface of the liquor, is '*rendered down*' and packed in cases for the soap-boiler, or the manufacturer of cart-grease.—Whatever remains after this operation, supplies the venders of dogs' and cats' meat with a dainty article of sale; at length the views of the greedy trader are directed to the bones of this noble animal; a number of persons find employment in chopping them into small fragments, from which the marrow is then extracted by boiling for several hours, and added to the fat already obtained from the carcase; the dry remains are employed in the production of hartshorn, by distillation; and, after this process is finished, they are removed from the still, and calcined to whiteness, in order to be mixed with clay, for the manufacture of porcelaine; or, they are consumed, for the formation of ivory-black.

" (5) The intolerable nuisance of a public brewery arises from the volumes of carbonaceous matter with which it overwhelms the neighbourhood. We shall, therefore, take this occasion to offer the remarks which we are prepared to make respecting the effects of smoke on the inhabitants of the metropolis, and on the methods which have been suggested for the mitigation of the evil. And upon this subject we entirely agree with an intelligent reviewer, that, after all, it is not a few chimnies attached to steam-engines that infect the air of London with smoke; every house is busy in the work of contamination, although less observed, because administered by separate vents, and in divided doses.

" In the year 1661, a work was published by the celebrated JOHN EVELYN, on the subject of this grievance, entitled 'FUMIFUGIUM; *or the Inconveniences of the Air and Smoake of London dissipated; together with some Remedies humbly proposed to his sacred Majestie, and to the Parliament now assembled.*' The above short 'discourse' has become exceedingly scarce, but the reader will find an interesting account of its contents in the Journal of Science and the Arts. It is certainly a curious coincidence, that the attention of John Evelyn should have been first excited on this subject by 'a presumptuous smoake issuing from one or two tunnels near Northumberland-house, and not far from Scotland-yard,'—the very seat of the plots of our modern fumifugists!—After adverting to the situation of the metropolis, 'built upon a sweet and most agreeable eminency of ground, at the north side of a goodly and well-conditioned river, toward which it has an aspect by a gentle and easie declivity,' he proceeds to animadvert upon that 'hellish and dismall cloud of sea-coale, which is not only perpetually imminent over her head, but so universally mixed with the otherwise wholesome and excellent air, that her inhabitants breathe nothing but an impure thick mist, accompanied with a fuliginous and filthy vapour, which renders them obnoxious to a thousand inconveniences, corrupting their lungs, and disordering the entire habit of their bodies.' It appears, that in Evelyn's time, brewers, dyers, lime-burners, and salt and soap-boilers were the principal nuisances; and, 'since then,' says the editor of the new edition of the FUMIFUGIUM, in 1772, 'we have a great increase of glass-houses, founderies, and sugar-bakers, to add to the black catalogue, at the head of which must be placed the fire-engines of the water-works

at London-bridge and York-buildings, which leave the astonished spectator at a loss to determine whether they do not tend to poison and destroy more of the inhabitants by their smoke and stench than they supply with water;' to which sooty list, says the reviewer in the Journal of Science and the Arts, above cited, 'what astonishing additions have been made, within the last thirty years, in and about London? How many new water-companies and smoke-producing manufactories have been added to the catalogue? A newspaper cannot now be printed, nor a pound of meat minced for sausages, without a steam-engine; to the same smoky servant the druggist resorts to grind his rhubarb and to sift his magnesia,* and upon all possible occasions the services of the other elements is superseded by that of fire.' With respect to the deleterious effects of smoke upon the health of the inhabitants of our mighty city, much difference of opinion has existed; amongst foreigners the air of London has the reputation of being extremely unhealthy, on account of the exhalation which arises from the use of coal; it excites in strangers, (says Zimmerman) a considerable heat in the stomach, and sometimes a spitting of blood, and even nervous fevers, which terminate in palsy. *(Experience in Physic, vol. 2, p. 137).* It is hardly necessary for us to make any observation upon a prejudice so absurd and unfounded; Evelyn also seems, in our opinion, to attribute more evils to the smoke than can be well substantiated; 'I report myself,' says he, 'to all those who have been compelled to breathe the air of other countries for some years, if they do not now perceive a manifest alteration in their appetite, and clearness of their spirits, especially such as have lived long in France and the city of Paris.' Although we are not disposed to consider the smoky atmosphere of London as so destructive to health as some have imagined, we are not prepared to state that it is entirely harmless. Children are certainly less healthy in this city than in the country; and the superior rapidity with which iron becomes oxidized, indicates the existence of atmospheric impurities. The phenomena of vegetation also offers another demonstration of the same fact; Evelyn has the following curious remarks upon this circumstance: 'That the smoake destroys our vegetation is shewn by that which was by many observed in the year 1664, when Newcastle was besieged, and blocked up in our late wars, so as through the great dearth and scarcity of coals, these fumous works were either left off, or diminished, divers gardens and orchards planted in the very heart of London, (as, in particular, my Lord Marquis of Hertford, in the Strand; my Lord Bridgewaters, and some others about Barbican,) were observed to bear such plentiful and infinite quantities of fruits, as they never produced the like before, or since, to their great astonishment; but it was by the owners rightly imputed to the penury of coales, and the little smoake which they took notice to infest them that yeare.'

"Although some difference of

* "By a visit to Apothecaries' Hall, or to any of the great manufacturing chemists, the stranger will be astonished at the number and utility of the applications of steam to the process of pharmacy.

"M. Dupin, when speaking of the immense mechanical force set in action by the steam-engines of England, gives the following illustration of its amount:—The great pyramid of Egypt required for its erection the labour of above 100,000 men for twenty years; the action of the steam-engines in England, which are, at most, all managed by 36,000 men, would be sufficient to produce the same quantity of work in 18 hours!!!

opinion may exist, as to the extent of the evil, in a medical point of view, we must all concur in agreeing upon the necessity of some plan by which it may be diminished; we shall, therefore, proceed to offer some remarks upon the proposals which have been made, at different times, for obtaining so desirable an object.

"*Mr. Evelyn's* plan consisted in the removal of all smoking manufactories from London, 'five or six miles down the river Thames, or, at least, so far as to stand behind that promontory jutting out and securing Greenwich from the pestilential air of Plumstead marshes.' He then proposes gardens and plantations in and about the metropolis, and enumerates a variety of fragrant plants, suited to our climate, and calculated to sweeten and improve the air.*

"In the year 1682, *Mr. Justell* communicated to the Royal Society, '*An Account of an Engine that consumes Smoke, shewn lately at St. Germain's Fair in Paris. Dr. Leutmann*, of Wirtemburg, described in his 'Vulcanus Famulans,' a stove which draws downwards, so that the contrivances of the *Marquis de Charbannes*, and others, who have burnt their smoke by a downright draught of air, were not original. *Dr. Franklin*, in 1785, (*Memoirs of the Life and Writings of Benjamin Franklin, vol.* iv. *p.* 408) suggested a mode of burning smoke; but to the illustrious *Mr. Watt*, we are more particularly indebted for the first important hints upon this subject; his patent may be seen in the *fourth volume of the Repertory of Arts*, for 1796, p. 226; and the great engines at the Soho manufactory have all along been worked without smoke; it is therefore not a little extraordinary, as a late reviewer has justly observed, that in the Report from the Committee of the House of Commons, to inquire 'how far it may be practicable to compel persons using steam engines and furnaces in their different works, to erect them in a manner less prejudicial to public health and public comfort,' and upon which report the bill of last session is founded, no notice is taken of *Mr. Watt's* suggestions and inquiries. In the Parliamentary Report, to which we have just alluded, there are two inventions for the destruction of smoke, which appear to have principally occupied the attention of the Committee, and which profess to accomplish the object, with a very considerable saving of fuel, viz.

"*Mr. Brunton's Fire Regulator.*—In this patent a newly-constructed fire-place is applied to the engine boiler, containing a circular grate, which is made to revolve slowly upon its axis; the fire upon this grate is fed in front by a kind of hopper continually delivering small coal, which, from the rotatory motion of the grate itself, becomes equally spread upon its surface, so as to maintain a thin fire, and a sharp draught; the coal is thus rapidly decomposed and burned; the smoke at first produced having to pass across the grate, and over the red-hot, and already coaked fuel.

"*Patent of Messrs. Parkes, of Warwick.*—The principal agent in this improvement is a current of air, admitted just beyond the end of the fire-place, by means of an aperture which may be increased, or closed at pleasure, and which the patentees term an '*air valve.*' A small fire is first made to burn brightly at the back of the grate; coals are then filled in towards the front, in which direction the fire gradually spreads; their smoke necessarily passes over the clear fire, where it becomes sufficiently heated to constitute flame,

* "It is supposed that the lime-trees in St. James's Park owe their existence to the suggestion of Evelyn."

as soon as it meets with the current of air entering at the valve; and a striking experiment with this apparatus consists in alternately shutting and opening the air-valve, which is accompanied by the alternate appearance and disappearance of the smoke.

"Instead, however, of insisting upon any form of fire-place, greater benefit would arise from an enactment respecting the height of chimnies; our intelligent reviewer, of whose remarks we have so frequently availed ourselves, observes, that by conveying black smoke, and other pernicious fumes into a capacious and very lofty chimney, much of the noxious matters that otherwise escape into the atmosphere are decomposed and precipitated or condensed within; of the truth of which, the chimney of the grand-junction engine, at Paddington, and that of the West Middlesex water-works, at Hammersmith, offer striking illustrations; when these machines are at work, the former produces little smoke, while the latter inundates the neighbouring gardens with perpetual showers of solid soot; and yet the only difference is in the relative altitude of the two chimnies; the boilers being, in all respects, set and constructed alike. A chimney from 150 to 200 feet would, in most cases, prove effectual; and the expense might be considerably lessened by making one shaft receive all the tributary fumes of many flues. But to return to the nuisance of breweries, from which we have made so long a digression; it is probable, that the smoke from these chimnies could not be remedied either by Brunton's or Parkes's patent, but the increasing the altitude of the chimney would seem to promise a mode of relief; we are also to look to the employment of steam as a substitute for fires; high pressure steam has been very extensively employed for this purpose in Whitbread's brewery, and the smoke has in consequence sustained a very perceptible diminution.

(6) "Sulphuric acid makers are continually indicted; and it would appear that by a scientific improvement in the process, the escape of the sulphurous acid, which constitutes the grievance, might to a great degree be obviated. How does it happen that, notwithstanding the cost of the materials necessary for the production of sulphuric acid, is in France at least double what it is in England, the French can afford to sell the article 25 per cent. cheaper than the English? the answer is obvious,—the great part of the materials are sent off into the air, in the form of *sulphurous acid*, and *nitrous gas*, to the annoyance of the neighbouring animals and vegetables, and the ruin, too often, of the proprietor. See *Journal of Science and the Arts.* In a report drawn up in the year 1806 by Guyton Morveau, and Chaptal, upon the subject of injurious manufactories, by command of the minister of the interior, it is declared that the distillation of acids can only prove dangerous from want of due precaution.

(To be continued.)

Maize Grain remarkably retentive of the Power of Germinating.—It is worthy of notice, that the maize which is found in the graves of the Peruvians, who lived before the arrival of Europeans in that country, is still so fresh, that, when planted, it grows well, and yields seed.

Remarkable Waterspout in France in 1823.—In the arrondissemens of Dreux and of Mantes, about 3 o'clock of the 26th of August 1823, a storm came on from the SW., accompanied with a sudden and powerful heat. A waterspout was seen not far from the village of Boncourt,

having its broad base resting on the ground, and its summit lost in the clouds. It consisted of a thick and blackish vapour, in the *middle of which were often seen flames in several directions.* Advancing along with the storm, it broke or tore up by the roots, in the space of a league, seven or eight hundred trees of different sizes, and at last burst with great violence in the village of Marchepoy, one half of the houses of which were instantly destroyed. The walls, overturned to their foundations, rolled down on all sides; the roofs, when carried off, broke in pieces, and the debris were dragged to the distance of half a league by the force of this aërial torrent. Some of the inhabitants were crushed to pieces, or wounded by the fall of their houses, and those who were occupied in the labours of the field, were overthrown or blown away by the whirlwind. Hailstones as large as the fist, and stones and other foreign bodies carried off by the wind, injured several individuals. Carts heavily loaded were broken in pieces, and their loads dispersed. Their axle-trees were broken, and the wheels were found at the distance of 200 or 300 paces from the spot where they were overturned. One of these carts, which had been carried off almost bodily, was pitched above a tile-kiln, which had been beaten down, and some of the materials of which had been carried to a considerable distance. A spire, several hamlets, and different insulated houses, were overthrown. Several villages were considerably injured. The lower part of the water-spout is supposed to have been about 100 toises in diameter.—See the *Moniteur* of the 31st October, where the account is signed by M. Foucault, and the *Bibl. Univers.* Oct. 1823. p. 133.

Sir.—Should you deem the following not unworthy a small niche among your varieties, you will oblige "a constant reader" of your interesting Magazine, by inserting them.

It is well known that very minute globules of water form lenses of great magnifying power; and that they have frequently been applied to that purpose by opticians: but the singular effects of drops of water forming powerful burning lenses in a natural manner, seems to have escaped general notice.

This phenomenon has been observed in the summer season, upon cabbages after a drought, on the succession of a sudden shower of rain; drops of water will be found collected in different-sized globules in cavities of the leaf; the sun's rays passing through these in different directions are concentered to a focus, and burn a hole in the leaf. Numerous perforations are to be observed in this useful culinary vegetable, which are supposed entirely to proceed from depredations of that destructive insect, the caterpillar; but this, however, is an erroneous notion, as the greater part of them originate in the above manner.

Another singular phenomenon, perhaps not generally known, is the following; if a common phial bottle filled with water, (which will form a burning lens by the sun's rays passing through it,) be brought near any inflammable dark-coloured substance, and within its focus, ignition will take place. Houses have actually been set accidentally on fire from similar causes. Y. Y.

Aurora Borealis.—Dr. L. Thienemann, who spent the winter of 1820 and 1821 in Iceland, made numerous observations on the polar lights. He states the following as some of the general results of his observations:

1. The polar lights are situated in the lightest and highest clouds of our atmosphere.

2. They are not confined to the winter season, or to the night, but are present, in favourable circumstances, at all times, but are only distinctly visible during the absence of the solar rays.

3. The polar lights have no determinate connection with the earth.

4. He never heard any noise proceed from them.

5. Their common form, in Iceland, is the arched, and in a direction from NE. and WSW.

6. Their motions are various, but always within the limits of clouds containing them.

On Charcoal from different Woods.—Mr. T. Griffiths has published, in the Quarterly Journal of Science, No. 32, p. 265, some interesting experiments on charcoal, which we give in the following Table.

	Specific Gravity.	Proportion of Charcoal in 100 parts of Wood.
Lignum Vitæ - -	1.342	17.5
Cocoas Wood - -	1.336	22.5
Ebony - - - -	1.226	30.5
Brazil Wood - -	1.132	26.
Satin Wood - -	1.078	20.7
Tulip Wood - -	1.070	20.8
King Wood - - -	1.069	22.
Botany Bay Wood -	1.067	28.1

Mr. Griffiths found, that charcoal from satin wood is the best conductor of electricity, and that from tulip wood the worst. The other charcoals discharge a battery with nearly the same effect.

On the Action of the pure Meconic Acid, and its Combinations with Potash and Soda.—A great difference of opinion having existed on the continent with regard to the action of the pure meconic acid, as well as the meconiates of potash and soda, on the animal economy, Dr. Fenoglio, together with N. Cesare and Donenico Blengini, of Turin, have performed several experiments, in order to discover the real power of these substances. It had been said that two persons had fallen victims to very minute doses (a grain) of the pure meconic acid, given as an anthelmintic; whilst, on the other hand, it had been taken by M. Suerteurner to the amount of five grains without inconvenience; and M. Sœmmering administered as much as ten grains of the pure acid, as well as the meconiate of soda, to dogs, without the least sensible effect. The experiments of Dr. Fenoglio prove distinctly that doses of eight grains of these salts, or of the pure acid, produce no deleterious effects on dogs, crows, or frogs; some of the animals experimented upon being suffered to live and others afterwards destroyed by prussic acid. The same experiment was afterwards repeated on a horse; eight grains of the pure acid, of the meconiate of soda and of potash, being given separately, and at the distance of a few days from each other, to this animal, without any marked effect being produced. It only remained now to ascertain the effect of these substances in the human subject; and, on the 15th of May, 1822, the opportunity was offered of exhibiting them to two sisters afflicted with tænia. The first, twenty-one years of age, took four grains of meconiate of potash; the second, aged nineteen, took four grains of meconiate of soda. These medicines had no sensible effect; not producing the expulsion even of any portion of the worm, which was afterwards got rid of by Madame Nouffler's remedy.

In a foot-note annexed to this article, Dr. Fenoglio attributes, with every appearance of truth, the death

of the two individuals above mentioned to the presence of morphia, from a defective preparation of the substance employed; and the account he gives of the symptoms that preceded their death gives great weight to his opinion.—*(Annali Universali).*

New Alkali in Jalap.—Mr. Hume, jun. of Long Acre, has just extracted from jalap a substance similar to the recently-discovered alkalies of opium, bark, nux vomica, &c. Having procured but a small quantity of this new substance, (for which he proposes the name of *jalapine,)* Mr. Hume is not yet enabled to give any satisfactory account of its chemical properties, nor of its action on the animal economy.

The mode of procuring jalapine is very simple. Coarsely-powdered jalap is macerated, for twelve or fourteen days, in strong acetic acid; a high-coloured tincture is thus obtained, which, when filtered, is to be supersaturated with ammonia, and the mixture violently shaken; a sabulous deposit will fall rapidly, and a few crystals will form on the sides of the vessel. The deposit and crystals are to be collected, and washed with distilled water; again dissolved in a small quantity of concentrated acetic acid, and reprecipitated by ammonia added to supersaturation, which throws down the jalapine, in small, white, acicular crystals.

Jalapine is without any perceptible taste or smell, and seems heavier than morphine, quinine, or other substances of this class; it is scarcely, if at all, soluble in cold water, and only to a small extent in hot water. Ether has no effect upon it; alcohol is its proper solvent. Very little trouble is requisite to purify jalapine from extractive or colouring matter, for which it appears to have a very slight affinity.

Mr. Hume, jun. operated only upon an ounce of jalap-root, from which quantity he conjectures, that, when the process is conducted with greater accuracy than usually attends a first examination, it will be easy to obtain about five grains of jalapine.—*(Private Letter from* Mr. Hume.)

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES, &c.

Royal Society, *London*, *Feb.* 19.—A series of meteorological and astronomical observations made in New South Wales, and on the voyage to that country, were presented from Major-general Sir T. Brisbane, K. C. B. F. R. S.

A paper was read "On the Semi-decussation of the Optic Nerves," by W. H. Wollaston, M. D. V. P. R. S.

Feb. 26.—A catalogue was presented from the Rev. Fearon Fellows, F. R. S. Astronomer at the Cape of Good Hope, of nearly all the principal Fixed Stars between the Zenith of Cape Town, Cape of Good Hope, and the South Pole.

A paper was read "On the various Degrees of Intensity of the Local Magnetic Attraction in different Parts of Ships," by George Harvey, M. A. S. communicated by John Barrow, Esq. F. R. S., Secretary to the Admiralty.

March 4th.—William Wavell, M. D. and Captain Philip Parker King, R. N. were admitted Fellows of the Society; the Lord Bishop of Limerick, and the Rev. E. Malby, Prebendary of Lincoln, being unable to attend for admission, requested to have their names inserted in the printed lists of the Society, which was granted accordingly.

A letter from the President was read, from Sir E. Home, Bart. V. P. R. S. entitled "Some curious Facts respecting the Wolves and Seals discovered in the Examination of Specimens brought home by the late Expeditions, from the Polar Circles."

A communication was likewise read, entitled "Some further Particulars of a Case of Pneumato-Thorax;" by J. Davy, M. D. F. R. S.; of which, and the preceding, we shall take occasion to notice as we proceed, where and when each subject may become an object of illustration.

Medico-Botanical Society, London, *Jan.* 15.—This Society held their Anniversary Meeting, when the following Coun-

cil was elected for the ensuing year, viz.—

Dr. Bree, F. R. S. President: Dr. Paris, F. R. S.; Dr. E. T. Monro; J. Brooks, F. R. S.; W. T. Brande, Esq. F. R. S.; Sir J. Mac Gregor, M. D. F. R. S.; Sir A. Crichton, M. D. F. R. S.; *Vice-Presidents*: W. Newman, Esq. *Treasurer*; Mr. C. Holdstock, *Secretary*; J. Frost, Esq. Professor of Botany; T. Jones, Esq.; W. Yarrell, Esq.; T. Andrews, Esq.; A. White, Esq.; Dr. J. Elliotson.

General Dispensary, *Aldersgate-street*.—On Monday last the annual festival of this no-less useful than benevolent institution, was holden at the Albion Tavern, Aldersgate-street, His Royal Highness the Duke of Sussex in the chair. The assemblage was numerous and respectable.

It appears, that from March 1, 1823, to March 1, 1824, that no fewer than 3,623 patients have been admitted into this one institution; and that the number cured, relieved, and dismissed, has amounted to the surprising calculation of 3,480.

This Dispensary was established in 1770, since which time no less than 177,209 individuals have been relieved by it; every year has gradually increased their numbers; and this year they have to boast of 420 patients more than the year before; this, alone, the Royal Chairman observed, was sufficient to prove the high character the Dispensary bore among the poorer orders. Amongst all these applications, the deaths were remarkably few. The numbers that had been relieved last year, were 3,623, and the total number of deaths was but 48. This was chiefly owing to the valuable medical gentlemen* attached to it, and on whom too much praise could not be bestowed for their assistance.

Medical Society of London, *Bolt-court*.—*Officers and Council for March*, 1825.—President, Dr. Shearman; Vice-Presidents, Dr. Clutterbuck, Dr. Chomeley, Sir Astley Paston Cooper, Bart., and Thomas Callaway, Esq.; Treasurer, John Andree, Esq.; Librarian, David Uwins, M. D.; Secretaries, T. J. Pettigrew, Esq., Thomas Callaway, Esq.; Secretary for Foreign Correspondence, Robley Dunglison, Esq.

Council, Drs. Walshman Hancock, J. G. Smith, Blicke, Bligborough, Hopkinson, Stewart, Darling, Haslam, Pierce, Cox, Burne, and Ley; Messrs. Winder, Thomas Clark, Sutleffe, Drysdale, Johnson, Dunlop, Kindon, Ward, Burton Brown, William Lake, Ashwell, Edwards, Handey, E. Leese, Skair, William D. Cordell, Thomas Bell, Ellerby, Amesbury, Bryant, and Burrows; Registrar, James Field, Esq.

To deliver the Anniversary Oration in March, 1825, Eusebius Arthur Lloyd, Esq.

The Annual Oration was delivered by Dr. Gordon Smith, one of the Vice-Presidents of the Society, who chose for his subject, "The Duties and Perplexities of Medical Men, as Professional Witnesses in Courts of Justice," a theme both novel and interesting. The discourse involved several points of the utmost importance to the practitioner, and not a few of considerable curiosity; with these were blended some valuable cautions as to the conduct which should be observed by the members of the profession, when called upon to discharge this peculiar and irksome part of their duties. We believe it is in contemplation to lay the subject before the profession in a more enlarged and practical form.

Calcutta Medical and Physical Society.—At a meeting of the Medical and Physical Society held lately, there was a very numerous attendance of members, and of visitors interested in the prosperity of the institution. Two distinguished individuals, Major-general Hardwicke and the Hon. Sir C. Grey, of Madras, were elected honorary members of the Society, and several new names were added to the list of non-residents. We are happy to learn that this is daily increasing, and already comprises a very large proportion of the medical gentlemen of both services [King's and Company's] on this establishment, besides some belonging to the sister presidencies.

Among many instructive communications read on Saturday, there was one of more particular interest, from its detailing the effects of the new remedy, iodine, in Goitre, (*Ghiga*, by the natives.) This disease, we understand, is extremely common in some districts of India, and the acquisition of so powerful an agent in its removal becomes therefore an object of the first importance. Though known for several years to the scientific world, as a distinct chemical principle, similar to oxygen, chlorine, &c. iodine has but very recently been applied to the practice of medicine, and it is on that account the more essential, that every fact connected with its administration in goitre, or other diseases, should be carefully noted and recorded. We should be glad to know whether, as it is a marine production, some plants, or *fuci*, may not be found on the shores of India, to yield iodine in greater abundance than those from which it has hitherto been obtained at home. This would seem highly probable, from the water of the ocean containing a larger proportion of saline ingredients in hot than temperate climates; and

* Drs. Clutterbuck and Birkbeck are the worthy and respectable gentlemen who preside as physicians over the above excellent establishment.

thereby, it may be presumed, imparting a character of greater intensity to the vegetable elements in whose formation it is accessory.

Another subject of great interest to all classes of the community, was brought before the meeting, namely, the destruction occasioned to timber by various kinds of insects. Specimens of the paroges were exhibited, of the tenas tatalis, or white ant, and the teredo navalis; and the members were solicited to direct their researches with a view to discover the best mode of preventing these destructive effects.—*Ind. Gaz.*

To James Johnson, M.D. and Ostensible Editor of the Quarterly Medico-Chirurgical Review.

Sir,—You first began playing with the jackass, and you ought to have been the last to quarrel with your play-fellow. Your conduct, in the first place, was as irrational as it has since been inconsistent and premature. You threw the first stone, you struck the first blow, you gave the first kick, but scarcely does your braying opponent advance "to the scratch," than, like a dunghill-cock, you drop your head and tail and run. Act consistently, Dr. Johnson, or do not act at all; what is it, I should like to know, to the world, what may be the opinion of the *respectable* editor of the Lancet, (the associate of Piper and Povey,) with respect to you; or yours, relative to him? You have foisted yourself once too often, I am afraid, upon the notice of your medical brethren, ever to attract much of their future confidence as a journalist, or a man of taste. Your weakness is manifested in a so peculiarly striking manner, that we shall have little trouble to make it apparent. You are the only man, in fact, the "*Lancet*" ever successfully wounded, and, it would appear, you still writhe under the *cut*. Why could not your own bare *ipse dixit* have sufficed, to satisfy your friends of your never having attempted "to publish the transactions of the Medical and Chirurgical Society," without dragging in Dr. Roget to give you a character for veracity? On what shallow basis must your "moral character" stand, if it will so readily admit of being implicated or levelled with any "notorious character" who may wantonly think fit to make a *cock-shy* of it, either for his amusement or his *profit?* How much, in troth, must the Medical Society, on the 9th of March last, have been edified by the lamentable "*viva voce*" appeal, made to it by you, "respecting the mendacity of the editor of the *Lancet*," while your correspondence with Dr. Roget, which, in fact, amounts to nothing at all, was being read to that luminous body!

Alas, how barren of interest the society must be, when it has no other subject to discuss than the wailings of the half-distracted editor of the Quarterly Medico-Chirurgical Review!!!

Why, sir, since you assert you never have published any of the transactions of the Medico-Chirurgical Society, do you begin to do so now, if such a step be a reproach, or contrary to the spirit and etiquette of the society? Here we have your address to the president, (with which we would disgrace our columns by transcribing it,) with the president's reply; a reply too, to which you were too impatient or rather too timid to trust, without some previous *exparte* confabulation; and this *exparte confab.* constitutes what you are pleased to designate your correspondence with Dr. Roget! And what is the sum total of this great *Medical Chirurgical fracas?* why

"GRATIANO speaks, and often writes an infinite deal of nothing, more than any man in all Venice; his reasons are as two grains of wheat hid in two bushels of *chaff*; you shall seek all day ere you find them; and when you have found them, they are not worth the search."

With these observations, sir, I leave you for the present; and sincerely do I hope that you will so far profit by them, as to induce you, for the future, to keep better company than that of "DISHONEST LIARS and INCENDIARIES;" or with a man, in particular, "whose principal merit (if it can be called such) is the invention of a new species of dishonour on the profession." ARGUS.

April 2, 1824.

MELANGE.

A German physician is on the point of establishing at Vienna, in conjunction with a rich and benevolent capitalist, an institution, the exclusive object of which is to be the treatment of diseases of the lungs. He declares that these diseases are not incurable, as they are generally believed to be; and that he possesses the means of curing them, when they have not reached their last stage.

GREEK NEWSPAPER.—The first number of a Greek newspaper, printed in modern Greek, has just arrived in this country. The types were forwarded from this country by the Greek committee. The first article in it is the disreputable proclamation of Sir Thomas Maitland, which has been the subject of so much animadversion. It appears, that the chest containing Lord Byron's treasure had been seized in a neutral ship by the Turks, but they had been obliged to restore it to him.

A Dublin paper says, "there are now *five hundred and thirty practising barristers* in Dublin!" If all of them get a living, we suppose it must be by pretty *sharp practice*.

Meteoric stones.—It is said one of twelve pounds weight fell recently at Aranazo, in Italy. Thunder and a violent tempest accompanied this phenomenon.

Ancient Coins.—The Kelso mail mentions the finding, at Gordon in Berwickshire, of a small horn, containing fourteen silver coins, about the diameter of the present shilling, but not quite so thick. On one side is the head of the prince, with the legend *Henriu di Gra. Rex. Ang. et Fran.* On the obverse is the cross, with a border, inscribed *Posui deum, Adjutorem Meum*, and on an inner circle *Villa Calisie.* These are taken to be a coinage of Henry V. (the final *u* in the name *Henriu*) and stamped by that great and victorious king at Calais.

Rome.—Some labourers at work lately on a plantation in the *Vigna* of the College of Saint Bonaventura, near the baths of Cascalla, found an Amphora of Terra Cotta, which contained a considerable number of gold trinkets of exquisite workmanship, such as necklaces, bracelets, &c.

Norway.—M. Boye, a naturalist who chiefly studies ornithology, has published a narrative of a tour in Norway, as far as Lofoden. At Seyerstad he could not indnce a woman to accept any kind of payment for the dinner which he had just eaten. She led him to the window, and pointing to the surrounding country, said, "So long as the earth shall give us corn, and the sea fish, no traveller shall ever be able to say that we have taken money of him." In the isle of Tiætæ, where he landed wet through, in the middle of the night, the servants of M. Brodkorb, the proprietor of the island, conducted him, without inquiring his name, into a well-furnished and well-heated room, where he passed the night. The next morning he and his fellow-travellers were invited to breakfast with the family. A few years ago, the proprietor of the isle of Forwig caused the rudder of a boat, which had brought some travellers to the island, to be secretly taken away, in order to compel them to remain at his house till a new one could be made. The community of interests between the inhabitants, their retired situation, and the small number of travellers who visit them, afford an explanation of their manners, though without depriving them of their patriarchal and Homeric character.

Engraving of a Brazilian Forest.—Naturalists and travellers have essayed to make known to us the wild forests of South America: but neither the comprehensive descriptions of botanists, nor the harmonious periods of the most eloquent writers, have succeeded in imaging to the European mind, features of which there exists no model in the whole compass of its acquirements. How, in fact, can words delineate that luxuriance of vegetation, that variety of forms, those wonderful contrasts, which excite to admiration the most indifferent spectator. An able pencil alone could succeed in delineating some of those majestic beauties; and this has been done by M. the Count de Clarac, with a degree of perfection to which we had scarcely considered it possible to attain. Without being a botanist, he has seized the character of each plant, and has given to all the species which he has represented their peculiar port and grace. The wild fig-trees present themselves with their arches, the mimosas with their finely-divided foliage; the arborescent ferns and palms with their simple and elegant forms; the flexible stem of the bignoniæ, bauhiniæ, and cissi bend into festoons, twist into cords, and closely

tie together the neighbouring plants; the bamboos shoot up to a prodigious height; the cecropiæ display their digitate leaves; the balisier shows its buds, and the parasitic plants invest the fallen trunks with a new covering. In a word, every thing is beautiful in this design, because every thing is in strict accordance with nature; and it is to be wished that it may soon be followed by some others of those with which the portfolio of the author is filled.—*Bullet. Universel.*

On Monday se'nnight, the Society of Scottish Antiquaries heard two very interesting original historical documents read by Mr. Macdonald. One was an order signed "Huntly," for the disbursement of 40*l.* for perfuming (or embalming) the body of Henry Darnley; the other was an order for providing suitable mourning for the Queen, and was signed by her own fair hand. Copies of these very curious documents, we understand, were left with the Society.—*Kelso Mail.*

Gruithuisen; that is the name of a German Professor, who has recently discovered fortresses, roads, railways, and agricultural cultivation in the *Moon*. This quick-sighted gentleman is therefore quite as certain that there are residents in the *Moon*, as that he himself, very properly, resides in *Moon-ich*.

"Mr. Sergeant LENS has retired from the Bar." On reading the above in a Morning Paper, it appears that *now* the business of the Bar must go on *Volens*, as NO-LENS is requisite for the performance of it. *Lit. Gaz.*

Coal in Syria.—A stratum of coal, of considerable thickness, has been discovered in Syria, a few miles inland from the coast; and a pit or mine has been opened, from whence the Pacha of Egypt is preparing to draw supplies for the steam-boats which he intends to employ on the Nile and its branches.

North-Eastern Coast of Siberia.—Captain Cochrane, after two years' exploration of the north-eastern coast of Siberia, has ascertained that there is no junction between the continents of Asia and America.

Cultivation of the Clove in Hayti.—The clove is now cultivated in the vicinity of Port-au-Prince, in the island of St. Domingo. A single tree has produced sixty pounds, of excellent quality. Might not this plant be cultivated in the south-western parts of the United States? *American Paper.*

Vaccination.—The total number vaccinated, from 1818 to 1822, in the United Kingdom, (excepting the capital) is 327,521, and the total by the stationary vaccinators, for the same time, 34,275. In 1821, there were 90,000 persons vaccinated in Ceylon; 20,149 in the Presidency of Calcutta; and 22,478 in that of Bombay.

MARRIED.—On Tuesday last, at Clapham church, by the Rev. J. W. Esdaile, Robert Richardson, M. D. to Mary, eldest daughter of W. Esdaile, Esq. of Clapham-common.

On the 5th inst., at Bushey, Herts, Sarah, daughter of Thomas Monro, Esq. M. D. to Lieutenant Frederick Monro, of the Royal Artillery.

Obituary.

On the 3d inst., at a very advanced age, at his house in Half-moon-street, Piccadilly, William Cooke, Esq., long known in former literary circles. He was born at Cork, which city he left in the year 1766. He wrote the "Life of Macklin," the actor, with a "History of the Stage during the Life of that Performer;" also, the "Life of the celebrated Samuel Foote," with whom, as with Macklin, he was on intimate terms.

On Wednesday evening last, at the age of 73, at his house in the Regent's Park, Major-general George Lord Coleraine (the quondam Colonel Hanger). His majesty, grim Death, "might well have spared a better man."

On the 13th ultimo, at Clifton, Bristol, Mrs. Sophia Lea, distinguished in the literary world by the Comedy of "The Chapter of Accidents," the "Canterbury Tales," &c.

On the 26th ult., at Aberdeen, in the full possession of his faculties, Alexander Flockhart, in the 89th year of his age. He was a pluralist, but universally respected, having, for a long series of years, discharged all the important, though humble, duties of beadle, sexton, constable, weaver, and advertisement bell-crier, with exemplary fidelity.

On the 30th ult., in his 74th year, Mr. Thomas Walker, of Ongar, Essex, Surgeon.

Lately, at Ken-wood, in the 71st year of his age, Mr. Edward Hunter, a member of the Linnæan Society. He had been almost fifty years in the confidential employ of the "great," the late, and the present, Earls of Mansfield.

At Lucknow, Bengal, of cholera morbus, on the 19th of August last, John G. Gibson, Esq., Surgeon in the Hon. East India Company's service, and Physician to his Majesty the King of Onde, only surviving son of the late James Gibson, Esq., Surgeon, of Edinburgh; and, a few hours afterwards, Mrs. Ann Baillie, his wife, both universally esteemed and regretted.

THE MONTHLY

Medico-Chirurgical Review and Chemico-Philosophical MAGAZINE.

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" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

ANALYSIS OF MEDICAL JOURNALS, &c.

THE EDINBURGH MEDICAL AND SURGICAL JOURNAL. Number LXXIX.—Part I. ORIGINAL COMMUNICATIONS.

Art. I.—*Contributions to the Pathology of the Stomach, the Pancreas, and the Spleen.* By John Abercrombie, M. D., &c.

Part II. DISEASES OF THE PYLORUS.—These are a continuation of Dr. Abercrombie's Pathological Remarks, from the preceding number of the Journal before us.

"Though the affections," observes Dr. A., "of the pylorus seldom admit of medical treatment, there are several points connected with the pathology of them, that are worthy of attention. The disease usually begins with obscure symptoms, like a slight dyspeptic affection, obscure pain, indigestion, uneasiness after eating, &c.; and these symptoms go on gradually increasing, until, after a considerable time, the case puts on those appearances which indicate the existence of fixed organic disease. In other cases, the first symptoms are more severe, having the characters of an acute attack; and, after the first violence of them has subsided, periodical vomiting continues, and becomes permanent."

"When the disease has reached a certain period of its progress, we usually expect to find it characterised by periodical vomiting, returning with great regularity at a certain period after a meal; with fixed uneasiness at the epigastric region; and we commonly expect to discover, by examination, some induration in the region of the pylorus. All these symptoms, however, admit of considerable varieties."

Many of these varieties are illustrated with some very interesting cases and dissections, which present to us phenomena of considerable interest in the pathology of the disease of the pylorus, while they show the existence of it, characterised by gradual emaciation without any urgent symptom, or by symptoms which suffered such remissions as did not appear to correspond with the existence of organic disease.—In the dissection of one case,

"The pylorus was surrounded by a mass of scirrhus, the size of an orange, very firm, nearly cartilaginous. Among the intestines there were extensive adhesions. The body of the stomach, the liver, spleen, and pancreas, were healthy. There was some ossification of the valves of the right side of the heart, and the right auricle was remarkably distended with coagulated blood. —The lungs were healthy.

On the dissection of another case.

"A mass of scirrhus surrounded the pylorus, the size of an apple, and projected in the form of papillæ into the cavity of the stomach. The principal projection of the mass was backward, where it had formed adhesions, by means of which the pylorus was firmly bound down to the pancreas. The stomach was in other respects sound, and the other viscera healthy. The pyloric orifice was not so much contracted as it usually is in such cases, for it admitted the point of the thumb."

In another case, remarkable for its progress and the absence of all the symptoms which usually characterise the disease, the following appearances were found on dissection, viz.

"A large mass of scirrhus, for a few inches in extent, surrounded the pylorus, and the pyloric orifice was so narrowed as scarcely to admit the point of a very small finger. The inside of the mass open-

ed the inner surface of the stomach, by an ulcerated surface, covered with large cancerous-looking tubercles. The other parts of the stomach were tolerably sound, and the other viscera were healthy."

Dr. A. remarks, that it should be kept in mind, in these affections, though there be a considerable mass of scirrhus existing on the outside of the pylorus, there may be very little contraction of the pyloric orifice; but it does not appear that this circumstance regulates these peculiarities of the symptoms. Dr. A. has also added a case, and cites Chardel and Morgagni for others of a like nature, where symptoms, similar to those which usually accompany scirrhus of the pylorus, may arise from induration and thickening of other parts of the stomach, especially if the disease be of the tubercular kind, &c. &c.

Diseases of the Pancreas.—*Case* XI. "A man, aged 56, had been in bad health for about two years, with obscure symptoms of a dyspeptic kind. He had some pain in the left hypochondrium, extending into the back, with oppression of the stomach, indigestion, and gradual emaciation, and died, gradually exhausted, without any other symptom, except that, for a week or two before his death, there was a considerable degree of jaundice; he never had any vomiting, and his bowels were easily kept open. No disease could be discovered by examination during life, even after he became emaciated to the last degree.—*Dissection.*—The stomach and intestines were healthy. Behind the stomach, in the seat of the pancreas, there was a morbid mass, four or five inches in breadth, and somewhat less in thickness. It was closely attached to the spine, and surrounded the aorta. It varied in its structure, some parts being hard, almost cartilaginous, others softer, and composed internally of alternate layers of yellowish and white matter. The liver was somewhat enlarged and soft. The other organs were healthy."

Case XII. The symptoms in this case were, with the exception of vomiting, which prevailed here until the patient died exhausted, nearly similar to the preceding. On dissection, the pancreas was found in a state of scirrhous hardness, without much enlargement. No other morbid appearance could be detected in any of the other viscera.

Case XIII. The symptoms here were pain extending to the back. Vomiting began at length about two or three hours after dinner, although this does not appear to be a common symptom—a large irregular tumour was distinctly felt in the epigastrium, which was painful when pressed—could keep nothing on his stomach, &c.

Dissection.—"The pancreas was enlarged so as to form a mass, seven or eight inches long, about five inches broad, and about three inches in thickness. The stomach, the duodenum, and the arch of the colon, had formed adhesions to the mass; and the stomach seemed a little thickened in its coats. The other viscera were healthy."

There are many cases on record of chronic diseases of the pancreas; and they exhibit the same diversity of symptoms which occurred in the example now described.

Dr. Abercrombie observes, that, notwithstanding the importance which the ancients attached to the pancreas, as the seat of many obscure diseases, "it does not appear their opinions were founded on any accurate observations. There is much reason, however, to believe, that diseases of the pancreas have a most important influence upon the functions of digestion and assimilation, and may produce, in this manner, very serious effects upon the system; while the symptoms immediately arising from the disease are so slight and obscure, as not to indicate which organ is affected."

Inflammation of the pancreas is a rare disease; but several cases are recorded, where it was found suppurated and gangrenous.

Art. II.—*On the Circulation of the Blood in the Head.* By James Carson, M. D., Liverpool.

This is a very long article, occu-

pying full 26 pages: We shall, therefore, defer the analysis of it for the succeeding number.

Art. III.—*Cases of Neuralgia of the Face, and painful Affections of the Limbs, successfully treated.* By Robert Evans, M. D. Member of the Royal College of Surgeons, of London.

In stating these cases, the author observes, that he has no object in view but to contribute his mite of experience to the general stock of practical information; and, that as neuralgia seems to have yielded to various modes of treatment in the hands of different practitioners, some tending to invalidate the late recommendation of iron, and others to strengthen it, he conceives it to be his duty to bear testimony to the efficacy of Mr. Hutchinson's mode of cure, by publishing two cases, which were completely cured by the carbonate of iron, after other means had failed.

Art. IV.—*Case of Tic Douloureux, successfully treated by Carbonate of Iron.* Communicated by George A. Borthwick, M. D. F. R. S. E. Fellow of the Royal College of Physicians, Edinburgh.

This case, like the preceding, also goes to confirm the efficacy of the carbonate of iron.

Art. V.—*On the Dose of the Pulvis Antimonialis.* By F. Hawkins, M. D., Extraordinary Member of the Royal Medical Society of Edinburgh.

Dr. Hawkins, speaking of the Pulvis Antimonialis, observes, that "of the many valuable and powerful medicines, whose virtues have been long known and duly appreciated, the subject of the present communication has been usually esteemed not the least efficacious; but," continues he, "if I mistake not, the facts about to be related will show, not merely that its merits have been rated too highly, but that it is (in ordinary doses) *entirely enert*, and, as a medical agent, altogether useless."

In support of these assertions, Dr. Hawkins gives two instances; in one of which he administered the pulvis antimonialis to the extent of four grains, and increased half-a-grain every night, till it amounted to a scruple. When, finding no sensible benefit produced by what was then considered an enormous dose, he added a grain every night until the dose became half-a-drachm,—still no effect was produced, and five grains were added every night, till the dose reached a drachm; which was given night and morning, for many weeks, to a young lady affected with vertigo and epilepsy, and, certainly, "with some degree of benefit." Beyond this dose, Dr. H. says, he has not proceeded; not that he, by any means, suspects that a larger dose would be followed by more decided effects; but that the bulk of such a dose is extremely inconvenient for the patient to swallow.

"To another patient, similarly affected, two scruples were given twice a-day for some weeks: no function was in any degree affected by it; he was not relieved. A servant of my own took a scruple every night for a week, after which he left my house, and the medicine was discontinued. Other patients have taken the medicine in equally large doses, and with the same result. It never produced the least inconvenience (excepting from the bulk of the powder) to any of them.

To obviate any objection that may be made on the supposition that the medicine was either adulterated or badly prepared, Dr. H. states that a quantity was procured from the Apothecaries' hall, but which, in its effects, precisely agreed with that in ordinary use.

Art. VI.—*On the Effect of External Pressure on the Perineum, in preventing its Laceration during Labour.* By Edward Thompson,

Whitehaven, Member of the Royal College of Surgeons, London.

"When the os externum is opened slowly, and at intervals, by the child's head, the parts are seldom inflamed or lacerated."—SMELLIE.

It certainly is an object of no small importance, in conducting a labour, to save the perineum as well as the frænum from laceration. This melancholy occurrence, it is well known, is at times unavoidable; but more commonly, it may be referred to the most unpardonable negligence alone.

Mr. Thompson, in order to guard against the accident in question, recommends the method pursued by Mr. Barlow; which principally consists in attending to the slow exit of the head, keeping it back by the fingers, till the perineum becomes relaxed, and drawn back to the farthest. When this is effected, the head may be allowed to escape without fear of laceration, making support by the hand a trivial or secondary consideration. The hand acting, when used in this way, more on the principle of an inclined plane, than as an intended support for the soft parts. This plan, Mr. T. observes, will be found in every instance superior to the one commonly employed, as not only does it prevent laceration of the perineum, but, if rightly performed, of the frænum also, &c.

Art. VII.—*Case of Tetanus from Laceration of the Median Nerve.* By Robert Liston, Surgeon and Lecturer on Surgem, Edinburgh.

This case originated in a lacerated wound. The hand was amputated on the appearance of the tetanic symptoms, about 14 days after the accident. The branch of the median nerve going to supply the thumb, was found torn two-thirds across, and its extremity inflamed and thickened by nearly an inch.

"A dose of calomel and opium, two grains of each, was immediately exhibited, and two grains of the former and one of the latter ordered to be continued every hour.

"The bowels had been opened previously by medicine, and they were kept so by injections, containing castor-oil and spirit of turpentine. A blister was also applied to the back of the head and spine. The opisthotonos had next day totally gone off; the jaw could be more easily opened; the patient had slept well, without much starting; the motion of the limbs was quite free. In fact, in every respect he was so well, that very sanguine hopes of his recovery were entertained."

The patient, it appears, notwithstanding these favourable circumstances, became so obstinate that it was with difficulty he could be prevailed upon to take his medicine. The spasms returned, more especially in the lower extremities, and he complained of much pain in the right groin. All the preceding symptoms recurred—wine was exhibited to no purpose; he died on the 17th of July, three weeks from the accident, and eight days after the operation. Mr. Liston seems to think that, had the removal of the part been earlier performed, before the disease had been completely established, and taken such hold of the constitution, in all probability complete success would have followed it.

Art. VIII.—*Cases of Hernia.* By Joseph Swan, Surgeon, Lincoln.

Two Cases, Strangulated Ventral Hernia, and two of Congenital Hernia. One of each treated successfully.

Art. IX.—*Case of Melæna, with Dissections.* By Richard Martland, M. D. and M. R. C. S. L., &c.

Art. X.—*Observations upon the Effects of Cubebs in Gonorrhœa, Fluor Albus, and Chronic Rheumatism.* By W. Crane, M. D. Boston, Lincolnshire.

This is an interesting paper; and much will be due to the author, should cubebs be found even a palliative in chronic rheumatism; although we have very little confi-

dence ourselves in a remedy so fugitive and uncertain, as the one in question.

Art. XI.—*Medical and Meteorological Notices, with Reference to the State of Health and Disease in Newcastle-upon-Tyne, from December* 1822, *to December* 1823. By Henry Edmonston, A. M. Surgeon.

After some rather interesting metereological observations on the close of the year 1822, and the commencement of 1823, Mr. Edmonston remarks, that the fever which prevailed extensively during the autumn of 1822, declined very fast after November. Enumerating other occurrences of much importance, Mr. E. states, that it struck him, in the course of last year, to have observed in the streets of Newcastle-upon-Tyne, more hemiplegic persons than he had been accustomed to meet with, especially amongst the lower orders; as well as many cases of indisposition, connected with the cerebral functions, &c. In which affections, "perceptible" benefit, he thinks, was derived from the Ung. Tart. Antimon., according to the principle of Dr. Jenner.

"In hooping-cough, and other pectoral complaints, the *unguentum* has been found very serviceable; its effects, though not so immediate, appearing to be more permanent than those derived from blisters or issues, and its action more easily and equally kept up."

Mr. E. also adds, that—

"In the practice of our infirmary, nothing very remarkable has been observed. Sarsaparilla continues to hold a very high place not only in that class of complaints to which it is believed to be more particularly adapted, but in a variety of others. For example, in cachectic states of the stomach, relaxation and superficial ulceration of the fauces and mouth, and more especially in those anomalous and obscure conditions of the constitution, brought on by the too free and continued use or unsuitableness of mercury.* Hydrocyanic acid has had ample trials, and has been found to fail altogether in answering any of the confident expectations held out of its virtues. Much the same may be said of colchicum. The arsenical solution has succeeded in almost every case of chorea, in which it has been tried; a brisk purgative having been promoted."

Three cases of small-pox, it appears, occurred in the practice of this dispensary; but the disease did not spread. "Vaccination," says Mr. E., maintains itself in despite of all the attempts so vehemently and perseveringly made by a certain northern anti-vaccinist, to shake public confidence in its efficacy."—*Newcastle-upon-Tyne, 9th December*, 1823.

Art. XII. — *Description of an Instrument for passing Ligatures round deep-seated Arteries, used in Physiological Experiments.* By J. L. Prevost, M. D. Geneva.

Art. XIII.—*A Description of a new Instrument for tying Arteries, without the aid of an Assistant. Invented by Professor Ludwig Jacobson, of Copenhagen, and communicated by him to the Royal Medical Society of that City, in the Year* 1817. By George Wm. Stedman, M. D., late President of the Royal Medical Society of Edinburgh.

The instruments here alluded to, as well as in the preceding article, appear very ingenious, and may be found applicable to the purposes specified; but any description of them in this place, without the plate, would convey a very unsatisfactory idea of them.

Art. XIV.—*Case of obliterated Urethra, successfully treated with Lunar Caustic.* By Wm. Maclure, Surgeon, Glasgow.

A very able and creditable cure has been performed in this case.

Art. XV.—*Case of Sloughing of the Bladder, consequent on Parturition, successfully treated, with Re-*

* A similarly favourable report, with regard to this medicine, we are enabled to give from the journals of the Lock Hospital of this place.

marks. By James Guthrie, Surgeon, Kilmarnock.

This is also a case highly creditable to the persevering assiduity of Mr. Guthrie. There existed a communication by sloughing between the bladder and vagina. The catheter was the principal remedy, which, by its remaining night and day in the urethra, kept the bladder in the greatest state of contraction, a circumstance favourable to the union of the opening; with the application of sponge to the aperture.

Mr. Guthrie observes, that, the communication between the bladder and vagina was shut up by a soft but pretty firm cicatrix, at about the end of a month. That he examined his patient five months afterwards. She still remains perfectly free from her complaint; and that she has not the least inconvenience in retaining or discharging her urine.

Art. XVI.—*Further Remarks on the Treatment of Hydrophobia, by Injection of Narcotics into the Veins.* By Richard Pearson, M. D.

The remarks contained in this paper, on the treatment of hydrophobia, supplementary to those offered three years ago, in the 62d number (Vol. xvi. of the Edinburgh Medical and Surgical Journal) have, since the treatment of Magendie's case, at the Hotel Dieu, Paris, where, by injection of warm water into a vein, by which the spasmodic affection was removed, and the patient enabled to swallow liquids, given rise to the following suggestions.

"Therefore, *instead of warm water alone, and in large quantities*, I would still propose, as I did propose in my former communication on this subject, *warm water in very small quantities*, and impregnated *with narcotic substances*, to be injected into a vein in *cases of hydrophobia*, for the purpose of subduing the spasms, and enabling the patient to swallow both liquids and solids. The grand object being attained, what is then to be done? I would propose the administration of a brisk cathartic, copious dilution with mucilaginous liquids, camphor and other anti-spasmodics; and, after the operation of these medicines, sponging the body with cold water and vinegar, and giving, at the same time, internally, the nitric or muriatic acids; and, lastly, some of the vegetable tonics."

Art. XVII.—*Case of Bronchocele, successfully treated by Iodine.* By E. Barlow, M. D., Bath.

Dr. Barlow began the use of iodine by giving, twice a-day, 6 drops of a solution of 36 grains of the hydriodate of potass in an ounce of distilled water; which was gradually increased to three times a-day; then to 8, 10, 12, and 15 drops, which latter dose for some time was not exceeded, in consequence of the medicine shewing considerable effect over the size of the tumour, which, at one time, had reached the size of "a pretty large orange." As soon as the leech bites, which inflamed, admitted of the external application of the iodine, the size of a nutmeg was directed to be rubbed in night and morning, of an ointment composed of a scruple of the hydrodate of potass to an ounce of lard; which, in a week, produced so much irritation of the skin, that one of the daily frictions was omitted. Under this treatment the tumour rapidly subsided, and rhubarb and calomel were given throughout the course of the disease, and, for a short period, towards the end, the dose of iodine was increased to 18 drops, &c. &c.

Dr. Barlow intimated, and with much probability, that the efficacy of iodine in reducing glandular enlargements, leads him to think favourably of it, as an auxiliary remedy for tabes mesenterica.

LONDON MEDICAL AND PHYSICAL JOURNAL.—No. 303. (May, 1824.)

Art. I.—*Observations on the Pathology and Treatment of Spinal*

Diseases. By Edward Harrison, M.D. F.R.A.S. E.D.

With two engravings, explanatory of a patient's case before the treatment was entered upon, and after its completion; affording, with other cases detailed, satisfactory evidence of Dr. Harrison's method of treating spinal diseases.

Art. II.—*Case of Meningeal Apoplexy, with some remarkable Phenomena, and the Appearances on Dissection.* By James Johnson, M.D. Editor of the Medico-Chirurgical Review.

"Lady D—, aged sixty-two years, of full habit, and rather corpulent, residing in New-street, Spring-gardens, had been out in her carriage on Tuesday, the 10th of Jan. 1822, in very good health and spirits. At four p. m. she returned, and went into the back drawing-room, to finish a letter. At six o'clock her husband happened to look into the room, and saw her rolling on the floor, in a state of insensibility. Sir Astley Cooper and Dr. Johnson were called to her in a few minutes; Dr. Warren and Mr. Freeman soon after arrived. When placed on a sofa, Lady D— kept constantly throwing about her arms and legs, rolling her head and sighing. She was insensible when spoken to; her pulse was very unequal, and weak; her skin cool; her face pale; the pupils moderately fixed, and obedient to the stimulus of light. Sir Astley Cooper opened a brachial vein, but not more than one ounce of blood flowed. The pulse now fell considerably; the respiration became laborious; the muscular agitation subsided, and she appeared to be dying. On pouring down the throat some hartshorn and water, a slight effort to vomit ensued, and the pulse acquired some force. Ten grains of the sulphas zinci were administered, and mustard cataplasms applied to the feet. In a few minutes more, a similar dose of the sulphas zinci were administered, but no effect was produced on the stomach. Another vein was opened by Mr. Freeman, and two ounces of blood procured. The temporal artery was next divided, but, not bleeding to any extent, the aural branch was opened, and 36 ounces of blood were abstracted. The pulse now began to flag, and the artery was secured. On speaking loudly to the patient, she now evinced some degree of sensibility, and answered a few questions indistinctly, relapsing immediately into a state resembling sleep."

The patient died on the Thursday evening (about 51 hours from the beginning of the attack, and 18 hours after an apparent general paralysis of the voluntary muscles had taken place), notwithstanding the persevering, active, and appropriate treatment that had been adopted from the commencement.

Sir A. Cooper and Mr. Freeman opened the head on Friday evening, 24 hours after death, in the presence of Drs. Warren and Johnson—when, among other appearances of minor importance, there were some opacity and thickening of the tunica arachnoidea—a moderate effusion of serum between the latter membrane and the pia mater sufficient to raise it from the subjacent tissue, and render its opacity perceptible—the pia mater was infiltrated with black blood, resembling very much, in appearance, the tunica conjunctiva of the eye, when highly blood-shot, &c. &c. In the two lateral ventricles there was about an ounce of very red serum, and a small quantity in each of the other two ventricles; and at the base of the brain, the serous effusion amounting to about two ounces, &c. In the basilary artery, and in the circulus Willesii, there were points of calcareous deposition

observed; but no vessel of any magnitude was found ruptured within the head. The writer of the article observes, that:

"This dissection has afforded one of the most exquisitely marked specimens, perhaps, on record of what may be properly termed *meningeal apoplexy*, as distinguished from cerebral or cerebellic. In this case there is no rupture—no accumulation of blood in any particular part—no laceration or excavation of any portion of brain—no partial, though considerable general pressure. The symptoms were in strict accordance with these pathological phenomena. The uniform pressure over the whole encephalon, produced by this blood-shot state of the pia mater and diffused extravasation, was sufficient to abolish, or at least to suspend, the intellectual operations, without depriving the muscular system, whether voluntary or automatic, of its moving powers."

The disquisition appended to this case is somewhat too abstruse for practical detail; and what most surprises us, is, that Dr. Johnson, who conducts a periodical himself, (lately so barren of interest) should have suffered a case of this description to lie, since December 1822, forgotten on the shelf, and at this time of the day sending it for insertion to another journal.—Surely this does not remind us of "THE MAN OF ROSS"—'Who did good by stealth, and blushed to find it fame!'—*Quere.* Will Dr. Johnson borrow it back again in the next number for his Quarterly?

Art. III.—Dr. Ryan *on Hydrocyanic Acid in Angina Pectoris.* The history of hydrocyanic is detailed at considerable length in this article, &c. and many authorities quoted in support of its utility, &c.

Art. IV.—*An Experimental Enquiry into the proximate Cause of Fever.* By R. Calvert, M. D.

Art. V.—*Illustrations of the sedative and febrifuge Powers of Emetic Tartar.* By W. Balfour, M. D. of the University of Edinburgh. (Continued from the preceding Number.)

The remainder of this article consists chiefly of facts corroborative of former testimonies; substantiating Dr. Balfour's claim to originality, with respect to what he has advanced concerning the sedative virtues of tartrate of antimony and potass, &c.

Art. VI. *Case of extensive Ulceration of the soft Palate and Tonsils.* By J. Bacot, Surgeon to the St. Georges' and St. James' Dispensary.

*** *The original communications of this number of the Medical and Physical Journal, are more barren of interest than we have seen it for some time past. In fact, there seems to be a general dearth of medical incident, every where, at the present moment.*

LONDON MEDICAL REPOSITORY.
No. 5, (May.)

Art. I.—Dr. Carter's *Report of Cases treated in the Kent and Canterbury Hospital,* from July 1823 to the commencement of January 1824.

For the last series of these cases (communicated *through* Dr. James Johnson) we refer our readers to No. I. of this work, (Monthly Medico-Chirurgical Review, &c.) The present occupy 24 pages, many of which are interesting enough. They partake of a little of all sorts from confirmed phthisis to psoriasis inveterata.

Art. II.—Mr. Sprague's *Appendix to the London Pharmacopœia, concluded from page* 305.

Enema Anthelmenticum.

℞ Decocti Santonici, Oj.
Ferri Sulphatis, ʒj. ℳ.

N. B. Half this quantity is to be used for children.

LOTIONS. *(Formul extempor.)*

The following are very useful applications of this kind.

Lotio Acidi Hydrocyanici.

℞ Acidi Hydrocyanici, f. ʒss.
Spiritus Rectificate, f. ʒj.
Aquæ distillatæ, f. ʒ xss. Misce, et fiat lotio diligenter utenda.

Mr. A. T. Thomson relates a case

of impetigo sparsa, and another case of impetigo figurata, completely cured by the above lotion. The same plan of treatment, he informs us, has been pursued in every case of impetigo that has since come under his care at the Chelsea and Brompton Dispensary.

Lotio Acidi Nitrici.

℞ Acidi Nitrici ℳ 1.
Aquæ distillatæ Oij. Misce, fiat lotio.

Sir Astley Cooper, in his lectures, observes, "The best application that I know of for producing a slight stimulus and checking gangrene, is the nitric acid; nor is there any application equal to it. The best proportions are 50 drops to a quart of distilled water; it may be increased to one drachm, or diminished to 40 drops, should it excite much pain or uneasiness in applying it; but 50 drops, with the above-mentioned quantity of distilled water, generally agrees best." Sir Astley has seen this lotion produce a speedy good effect. It is applied by means of lint, over which an oil-skin is placed to prevent evaporation. This he, (Sir Astley) observes, is an excellent application, either in the sloughing condition of sores, or when the granulations are languid, &c. It also corrects the offensive smell, by destroying the sulphuretted hydrogen, which is usually given out in this condition of sores. The nitric acid lotion is equally useful for old indolent ulcers, attended with a thin ichorous discharge, and in caries of the bones.

Lotio Ammoniæ Acetatis.

℞ Liquoris ammoniæ acetatis, Oss.
Spiritus Rectificati, f. ʒ vj.
Aquæ distillatæ, ʒ x. Misce.

This lotion is of eminent use in erysipelatous and other external inflammations, but more particularly in the *early stage* of inflammation of the mammary gland, during suckling.

Lotio Ammoniæ Muriatis cum aceto.

℞ Ammoniæ Muriatis, ʒ ss.
Acidi Acetici Diluti.
Spirit. Rectificat. ā ā Oj. Misce.

Mr. S. Cooper observes, "this is one of the most efficacious discutient lotions. It is, perhaps, the best application for promoting the absorption of extravasated blood in cases of ecchymosis, contusions, sprains, &c. after the inflammatory action has subsided.

Lotio Cupri Acetatis.

℞ Oxymellis cupri acetatis, ʒ j. (per pond.)
Mistura Camphoræ, ʒ ij. Misce.

This lotion is particularly recommended for spreading foul ulcers of the face and scalp; for the cure of which, an eminent surgeon of Norwich considers it a specific. In a very extensive phagadenic ulcer of the face, Mr. Sprague found it completely sucessful.

Lotio Hydrargyri cinerea.

℞ Hydrargyri Protochlorid (Calomel) ʒ j.
Liquor. Calcis, f. ʒ vj. Simul agita.

The black wash of the oxide of mercury is extensively employed in the London hospitals, as one of the best applications to syphiletic sores, and in removing fungous excrescences situated about the roots of the nails, &c.

Lotio Hydrargyri Flava.

℞ Hydrargyri Oxymuriatis, gr. x.
Liquor Calcis, Oss.
Simul tere ut fiat Lotio.

This lotion is a very excellent application for venereal and scrophulous foul spreading ulcers, also in scabies and desquamation of the cuticle; and sometimes it is applied with good effect to those destructive ulcers of the face and nose denominated *noli-me tongere.*

Lotio Hydrarg. oxymuriatis.

℞ Hydrarg. oxymuriat. Gr. iv. tere cum.
Spiritit. rectificat. ʒ ij. tum adjice.
Aquæ distillat. Oj. m. F. lotio.

Useful in many affections of the cuticle, of an herpetic nature, &c.

Lotio Opii.

℞ Opii crudi concisi, ʒ ij.
Aquæ distillatæ, 0j.

Diligenter contere; dein coque lento igne per sextum horæ partem, et cola.

This lotion is a very excellent application to parts in a state of irritation, and to painful ulcers of every description.

Lotio Picis.

℞ Picis Liquidæ, ℥ iv.
Calcis, ʒ vj.
Aq. pluvial. fervent. 0iij.

To be boiled till half the water is evaporated. The rest is to be poured off for use.

Sometimes employed for the cure of tinea capitis; it is also of singular service in removing an extensive scorbutic redness, frequently seen on the legs, accompanying old ulcers.

Lotio Plumbi Acetatis.

℞ Liquor Plumbi acetatis, ʒ ij.
Acidi Acetici diluti, ʒ iv.
Spiritus Rectificat. ʒ j.
Aquæ Distillatæ, 0j. Misce.

This is an excellent formula in cases of inflammation, where applications of lead are deemed beneficial; but for either gonorrhœa, or opthalmia, it must be used in a much more diluted state, e. g.

℞ Liquor Plumb. Acetatis, ♏xv. ad xx.
Acid. Acetic. Dilut. ʒ ij.
Aquæ Distillatæ, ℥ vj. Misce.

If this be employed as a collyrium, the proportions must be modified, according to the irritability of the inflamed eye.

Lotio Potassæ Sulphureti.

℞ Potassæ Sulphureti, ℥ ss.
Liquor Calcis, 0j.

The sulphuret of potass is to be powdered and well triturated with the lime water.

This will be found an excellent application in porrigo galeata, scabies, and lepra.

We shall conclude Mr. Sprague's appendix in our next, and offer, at the same time, some remarks, &c.

Art. III.—*Case of perfect Hymen at the full period of Utero-gestation.* Communicated by William Brennand, Esq. Member of the Royal College of Surgeons, London.

To prove that this was not a morbid adhesion of the parts, which is sometimes known after severe parturition, which could not have been the case in this instance, as it was the first confinement, the following, it appears, is the certificate given to the friends of the young woman, dated December 18th, 1823, by "an eminent lecturer on midwifery."

"The hymen in this case is infundibuliform, completely unbroken, and so small in its aperture that an organ of ordinary size could not pass without rupture. This case clearly proves that complete penetration of the male organ into the vagina is not essential to impregnation.

The labour proceeded slowly, and the head of the child became so firmly impacted in the pelvis, as to require artificial assistance. The attendance of Dr. Ramsbotham was requested, "when it was deemed most advisable to open the head, which was immediately done with his usual ability."

Art. IV.—*Case of Fracture of the Cranium, with Depression.* By John Ripley, Esq. Whitby, Licentiate of the Royal College of Surgeons, Edinburgh, and of the Society of Apothecaries, London.

Art. V.—*Case of Strangulated Crural Hernia.* By John Ripley, Esq. Whitby, &c. &c.

REVIEW OF NEW BOOKS, &c.

Pharmacopœia Collegii Medicorum Londinensis, 1824. 8vo. Londini, 1824.

The present work comes before us as a new edition, sanctioned by an order of his majesty in council, which "doth strictly require, charge, and command, all and singular apothecaries and others, whose business it is to compound medicines and distil waters, or make other extracts," in England, Wales, and Berwick-upon-Tweed; that they "do not compound or make any medicine,

or medicinal receipt, or prescription, or distil any oil or waters, or make other extracts, that are or shall be in the said *Pharmacopœia Collegii Regalis Medicorum Londinensis*," and so forth; a regular custom-house oath, which every manufacturing chemist, and every compounder of medicine, thinks himself justified in contravening whenever he may deem it fit, seasonable, and profitable, without any apprehension of incurring "His Majesty's just displeasure," or of being proceeded against for such their contempt and offence, according to the utmost severity of the law, &c.

The general arrangement of the Pharmacopœia remains the same as in the preceding edition; and in the Materia Medica, there are not many alterations. The new articles introduced are, *acidum aceticum fortius;* strong pyrolignic acid, having the sp. gr. 1.046, and 100 grs. requiring 87 of subcarbonate of soda to saturate them; *antimonii vitrum*, vitrified sulphuretted oxide of antimony; *bismuthum; marmor album; acidum citricum; magnesiæ subcarbonas*, and *potassæ sulphas*, formerly only among the articles to be prepared by the apothecary, are now permitted to be purchased as articles of commerce, from the manufacturing chemist. *Colchici, conici et digitalis semina*, the seeds of these narcotic vegetables, of which the leaves or herb were formerly inserted. *Daturæ foliæ et semina*, another narcotic, both herb and seed, for the first time officinal. *Lactuca*, for its inspissated expressed juice. *Cubeba*, the dried berries used in gonorrhœa. *Helenium*, elecampane root, as an ingredient in the *confectio piperis nigri; krameriæ radix*, rhatany root, an astringent, and Tiglii oleum, croton oil.

The following articles are rejected: *aloes vulgari extractum*, Barbadoes aloes; *vinum*, wine, which they do not employ, although vina is retained as a title of the section of the preparation, and vinum, as the title of five preparations which contain not a drop of wine, which is certainly very amusing.

The changes in other respects are very trifling. The *acidum aceticum impurum*, as the scientific name of *acetum* has been omitted; *arsenici oxydum* has become *arsenicum album*, with *acidum arseniosum* as its scientific name, &c.

The alterations in the second part in the *preparata* et *composita*, are neither numerous nor important.

Acida.—Benzoic acid is now directed to be prepared by sublimation, instead of solution in lime-water and precipitation. The strength of the acids is estimated by subcarbonate of soda, instead of chalk, &c.

Alkalia et eorum sales. In preparing the liquor ammoniæ, the receiver is ordered to be kept cool, not exceeding 50°, &c.

No changes have taken place in the following:—*Terræ et eorum sales, sulphurea, vegetabilia, olea expressa, olea distillata, infusa* (no change except the addition of the epithet compositum to the titles of the *infusum lini et infusum rosæ*) *mucilagines. Decocta, misturæ, tincturæ, acetica, mellita*, pulveres, *præparata ex animalibus* cerata, unguenta, linimenta, and cataplasmata the same.

The changes in nomenclature are few; and although of no great importance, are not injudicious.

Symptomatology; or, the Art of detecting Disease, a Lecture occasionally read to the Pupils of Westminster Hospital, and published according, at their request. By Alex. P. Buchan, M.D. F.L.S. late Senior Physician to that institution, &c. *to which is added, Tables of Symptoms*, 12mo. pp. 190.—Callow and Wilson, London 1824.

This, doubtless, is a very valuable

little work to the rising part of the profession, for whom alone it is intended; at the same time, it is to be hoped, that it may serve as a gentle hint to the coarse and unpolished practitioner who attempts eccentricity, where urbanity, and a sense of proper consideration for the state of his patient, would better become him.

The discussion relative to the antiquity of the two branches of the healing art, and the story told in the note, are interesting enough as a prelude to that which follows.

In the nineteenth and twentieth pages, there are some very judicious hints to be met with as regards the manner of examining a patient, and inquiring into disease. The symptom treated of is pain, the consideration of which occupies upwards of ten pages, affording scope for a great deal of reflexion.

The following paragraph, extracted from the work before us, may serve as an useful caution to young practitioners.

"The impropriety and indecorum of a physician, immediately on entering a sick chamber, seizing the arm of an invalid, and rudely applying his hand to the pulse, especially if a stranger to the patient, is abundantly obvious. The very presence of a medical man often agitates the nerves of a sick patient so much as to occasion material aberrations from the real state of the pulse. Conceiving it impossible to offer more correct instructions for the conduct of a physician on such an occasion, than those laid down by Celsus, I shall translate the passage from the work of that elegant writer.

"'It by no means,' says he, 'becomes a skilful physician, as soon as he enters the apartment of the sick, to seize the hand of the patient. He ought preferably to sit down, and with a calm and compassionate countenance to inquire concerning his usual state of health; and, if he perceives him to labour under any degree of timidity or depression of spirits, he should endeavour to sooth his mind by kind and encouraging conversation. After a proper interval, he ought, in a quiet and gentle manner, to apply his fingers in succession to the carpus. How frequently,' he adds, 'does the very sight of a physician perturb the pulse, the rhythm of which is liable to be deranged by a variety of slight circumstances.'" (p. 42, 43.)

The observations relative to the pulse, generally, are extremely good; and the same may be said of the remarks upon the appearance of the urine,—a subject not so much attended to as it deserves; this excretion affording, in many diseases, very important information to the experienced practitioner. The following hints are not unworthy of attention.

"Unnecessarily to multiply our questions, is always distressing to the patient. Irritability of temper is generally the concomitant of disease; and I have often observed, that sick persons will frame such replies as you seem to expect, rather than be teased with a protracted examination. This is probably one reason why many persons resort to those who pretend to discover the nature of diseases from the inspection of the urine alone, without asking any questions. Patients are, moreover, prone to consider too many questions as implying ignorance of the nature of their complaint. A lady once asked me, in a peevish tone, how those persons, who cured horses and dogs, found out what was the matter with them. We should, therefore, carefully endeavour to make ourselves acquainted with every obvious indication of disease, that may tend to diminish the necessity of troubling our patients with a multitude of interrogatories." (p. 79, 80.)

It is asserted, at page 90, as an unfavourable omen, when the countenance of a sick person assumes a strong resemblance to that of either parent; not, perhaps, observable during health. This, however, we believe is only true in the last stage of chronic disease, and simply the effect of emaciation; so that the contour of the countenance becomes changed, the plump and fresh features of youth and health are removed, and the resemblance to the aged and wrinkled parent becomes visible. As an omen, then, we apprehend this change of feature to be of no importance.

Taking Dr. Buchan's little work

as a whole, and without further scanning its merits, it will, we have no doubt, prove both useful and acceptable to the medical pupil. With respect to Dr. Buchan's suggestion relative to the bodies of persons who may die in hospitals, &c. he does not stand alone on that ground: and firmly do we believe, that much benefit might be derived from such and similar sources, without violating the feelings either of friends or of relatives.

RELIQUÆ DILUVIANÆ; *or Observations on the Organic Remains contained in Caves, Fissures, and Diluvial Gravel. By* Professor Buckland. *Murray, (Albemarle-street.)*

[Continued from page 75.]

"The only remains that have been found of the tiger species, are two large canine teeth, each four inches in length, and a few molar teeth; these exceed in size that of the largest lion or Bengal tiger. There is only one tusk of a bear, which exactly resembles those of the extinct ursus spelœus of the caves of Germany; the size of which, M. Cuvier says, must have equalled that of a large horse. Of the fox, there are many teeth. A few jaws and teeth have, also, been found of the weasel. Teeth of the largest pachyærmatous animals are not abundant. I have information of about ten elephants' teeth, but of no tusk; most of these teeth are broken, and as very few of them exceed three inches in length, in their longest diameter; they must have belonged to extremely young animals. I have seen but six molar teeth of the hippopotamus, and a few fragments of its canine and incision teeth, the best of which are in the possession of Mr. Thorpe, of York. Teeth of the rhinoceros are not so rare. I have seen at least fifty; some of them very large, and apparently from aged animals. I have heard of only two or three teeth belonging to the horse. Of the teeth of deer, there are, at least, three species; the smallest being very nearly of the size and form of those of a fallow deer; the largest agreeing in size, but differing in form from those of the modern elk; and a third, being of an intermediate size, and approaching that of a large stag or red deer.

"I have not ascertained how many species there are of the ox, but apparently there are two. But the teeth which occur, perhaps, in the greatest abundance, are those of the water rat; for in almost every specimen I have collected or seen of these osseous breccia, there are teeth or broken fragments of the bones of this little animal mixed with and adhering to the fragments of all the larger bones. These rats may be supposed to have abounded on the edge of the lake, which I have shewn probably existed at that time in the neighbourhood: there are, also, the jaw of a hare, and a few teeth and bones of rabbits and mice.

"Besides the teeth and bones already described, the cave contained, also, various fragments of horns, of at least two species of deer; none of which are found entire, but apparently gnawed to pieces like the bones; their lowest extremity near the head is that which has generally escaped destruction; and it is a curious fact, that this portion of all the horns I have seen from the cave, shows, by the rounded state of the base, that they had fallen off by absorption or necrosis, and been shed from the head on which they grew, and not broken off by violence.

"It must already appear probable, continues the professor, from the facts above described, particularly from the comminated state and apparently gnawed condition of the bones, that

the cave at Kirkdale was, during a long succession of years, inhabited as a den by hyænas, and that they dragged into its recesses the other animal bodies whose remains are found mixed indiscriminately with their own: this conjecture is, indeed, almost certain, by the discovery I made of many small bodies of the solid calcareous excrement of an animal that had fed on bones, resembling the substance known in the old materia medica by the name of Album Græcum. It was, at first sight, recognised by the keeper of the menagerie at Exeter Change, as resembling, both in form and appearance, the fæces of the spotted, or Cape hyæna; which he stated to be greedy of bones beyond all other beasts under his care. Dr. Wollaston analised this substance, found it to be composed of phosphate of lime, carbonate of lime, and a small proportion of the triple phosphate of ammonia and magnesia; it retains no animal matter, and its originally earthy nature and affinity to bone will account for its perfect state of preservation.

"I do not know, he further observes, what more conclusive evidence than this can be added to the facts already enumerated, to show that the hyænas inhabited this cave, and were the agents by which the teeth and bones of the other animals were there collected; it may be useful, therefore, to consider, in this part of our inquiry, what are the habits of modern hyænas, and how far they illustrate the case before us.

The modern hyæna, (of which there are only three known species, all of them smaller and different from the fossil one,) is an inhabitant exclusively of hot climates; the most savage, or striped species, abounds in Abyssinia, Nubia, and the adjacent parts, Africa and Asia. The less ferocious, or spotted one, inhabits the Cape of Good Hope, and lives principally on carrion. He is seldom seen by day, but prowls about by night, and clears the plains of the carcasses, and even skeletons, which the vultures have picked clean, in preference to attacking any living creature. In the structure of its bones this animal approaches more nearly than the striped hyæna to the fossil species: to these M. Cuvier adds a third, the red hyæna, which is very rare.

"The structure of these animals places them in an intermediate class, between the cat and dog tribes; not feeding like the former, almost exclusively on living prey, but like the latter, being greedy of putrid flesh, their love of which induces them to follow armies, and dig up human bodies from the grave. They inhabit holes in the earth, and chasms of rocks; are fierce, and of obstinate courage, attacking stronger quadrupeds than themselves, and even repelling lions. "They come in herds," says Brown, "of six or eight, and often more, into the villages at night, and carry off with them whatever they are able to master; they will kill dogs and asses even within the enclosure of houses, and fail not to assemble wherever a dead camel, or other animal is thrown; which, acting in concert, they sometimes drag to a prodigious distance. The strength of the hyæna's jaw is such, that in attacking a dog, he begins by biting off his leg at a single snap. The capacity of his teeth for such an operation, is sufficiently obvious from simple inspection; and consistent with his strength of teeth and jaws, is the state of the muscles of his neck, being so full and strong, that in early times this animal was fabled to have but one cervical vertebra. They live by day in dens, and seek their prey by night having large prominent eyes, adapted,

like those of the rat and mouse, for seeing in the dark. To animals of such a class, the cave of Kirkdale would afford a most convenient habitation; and the circumstances we find developed in it are entirely consistent with the habits above enumerated.

It is not our purpose to follow the learned professor through all his descriptions of the various caves of England and other countries, but we have selected that of Kirkdale, as having excited such universal interest. To philosophers and the curious inquirer into nature's ways, this book will afford infinite gratification.

SKETCHES IN BEDLAM; *or, Characteristic Traits of Insanity, as displayed in the Cases of* 140 *Patients of both Sexes, now, or recently confined in New Bethlem, including Margaret Nicholson, James Hatfield, &c. &c. To which is added, a Succinct History of the Establishment.*" &c. By a Constant Observer. 8vo. p. 312.

"See how the noble mind is here o'erthrown."

As a faithful sketch of the inmates of one of these infirmaries for the mind may not be uninteresting to our general readers, more especially to the medical practitioner, whose duty and interest it is to study equally the phenomena of health and disease, in all parts and functions of the human fabric, we have made the following extracts from the work before us.

Old Bethlem, in Moor-fields, was built on the plan of the Royal Palace of the Tuilleries, at Paris, which imitation gave such offence to the *grand monarche*, Louis XIV., that he ordered the plan of St. James's Palace to be taken for an office that shall be nameless; the present hospital is a noble pile of building, erected on the site of the once celebrated dog and duck tavern—a curious revolution from scenes of voluntary madness excited by wine, to the straight-waistcoat and solitary cell of the present colony of maniacs; it is capable of containing 200 patients of both sexes, besides two wings for criminals, supported by Government, and calculated to accommodate 60 more. The asylum is supported partly by the Bridewell estates, and partly by voluntary contributions. The building and grounds occupy an area of about twelve acres. Physicians, Sir George Tuthill, and Dr. Thomas Munro. — Surgeon, W. Lawrence, Esq.—Apothecary and Superintendant, Dr. Edward Wright. The patients rise every morning, in summer, at six, and in winter, at seven o'clock. They breakfast at eight and half-past eight—dine at one—sup at six, and retire to bed at eight, when they are locked up.

In respect to treatment (moral) the grand principle is mildness, as being generally acknowledged the most fitting for the maniac. The breakfast throughout the year is wholesome gruel mixed with milk, and two ounces of bread. The dinner varies every day, and seems to average about half a pound of meat every other day, with good vegetable and farinaceous substitutes and auxiliaries in the intervals and on meat days. Excellent table beer is allowed without any stint as to quantity. The clothing, bedding, and indeed all the other regulations, appear to be excellent in their kind. It is strange that, notwithstanding the excellence of this establishment, and the supposed increase of insanity, there are generally a considerable number of vacancies—"although the only qualifications for

admission here are insanity and poverty." The disqualifications are 1st. The possession of property sufficient for their support in a private asylum—or affluent relations. 2d. More than 12 months duration of the disease. 3d. The having been discharged uncured from some other asylum. 4th. Pregnancy. 5th. Idiotcy, palsy, or epilepsy. 6th. Syphilis or itch. 7th. Such debility from age as to require a nurse, or to threaten speedy dissolution

A certificate from the minister, churchwardens, overseers, and a friend or relation, stating that the foregoing regulations have been read, and that the patient is not in any of the states or conditions therein specified, is required, together with a medical certificate from a physician, surgeon, or apothecary.

We now come to offer a few sketches of the inmates of this intellectual lazar-house to our readers, selecting those which are most interesting, beginning with

Pat Walsh. This ferocious maniac has been deranged altogether about twelve years, and has uniformly evinced a character of desperation, vengeance, and sanguinary cruelty, scarcely conceivable even in madness. He is more like a tiger than a human being. It is not improbable that a disposition naturally fierce and cruel has changed to insanity from the intolerable stings of a tortured conscience. It is sufficient to say, that this wretch was a ringleader in the mutiny of the Hermione frigate, in 1797, when the crew rose on the officers in the West Indies, and murdered them all except the surgeon and one master's mate. Notwithstanding all the precautions that have been taken, he has killed three persons since his confinement. How many he may have slain in honourable combat is unknown; but it is certain, that after the horrible mutiny above-mentioned, he fought alongside of Abercrombie, in the battle of Aboukir, and with Nelson in the battle of Trafalgar. The organ of *combativeness* ought to be strongly developed in this man.

One of the three murders alluded to, was commited in the present establishment. Having behaved well for some time, he was under no great restraint in April, 1820, when he contrived to secrete the blade of an old knife, which he sharpened to a point, and watching an opportunity, he plunged it twelve or fourteen times into the body of a poor sickly patient, named Dennis Leonard, with such force and fury that each stab would have killed a giant. After this he was handcuffed, but broke them into a thousand pieces. He is now confined in an iron cincture that surrounds his waist, with strong hand-cuffs attached to it.

"But his propensity to mischief, malice, and personal abuse, are as incessant as his taste for bloodshed and slaughter. He has contrived, notwithstanding his restriction of hands and feet, to break above seventy panes of glass, within the last two years, in the dining-room windows, although guarded on the inside by a strong iron lattice-work. This amusement he contrived to effect by standing on a form placed at some distance from the windows, and taking the bowl of the wooden spoon in his mouth, he poked the handle through the meshes of the wire-work, and thus broke the pane."

Bloodshed and massacre are the constant topics of his phrenzied discourse. His vengeance against poor Leonard was excited by some dispute about *Religion!* He told the coroner's jury, that if he could obtain the king's crown, and all the riches of the universe, he would not forego the pleasure of killing him, for all would be nothing to the ease of mind he felt in putting him out of the way.

"Even his very dreams, when he sleeps, are occupied with scenes of fury and ven-

geance; and he takes delight in detailing them the next morning. When he dreams of having murdered any, and sometimes all of the patients above named, he wakes quite pleased, and details the scene with much satisfaction; and the manner in which he has gratified his vengeance, and what fine fun he had in seeing them die. He thought he had a sword, with which he first cut all their throats, and then walked round them to see which should live longest; that when they were all dead, or nearly so, he split their skulls, and then transposed the brains from Hallwood's head into that of Lloyd; Lloyd's into Coates's; his to Jenkins's; his again into the Spaniard's, and his again to Hugh Dams's. He then ripped up their bellies, and changed their entrails in like manner; and then he hung and burned them all: but the only thing that grieved him was to hear them all talking in the gallery next morning. He stamps and raves most of the day, and nearly all night, with a piece of blanket crammed in his mouth, gnawing and tearing their souls out, as he imagines and terms it. He picks up pieces of glass, old nails, bones, and spoons, which he grinds to a point, stones of a convenient size for flinging, and indeed every thing that is likely to enable him to do mischief, to which he is always inclined if he has an opportunity."

There is a Greek confined in the same place, and nearly as furious as Walsh. The scenes that pass between these two, though at a distance, are terrific. The great wonder is, that nature should be able to sustain such dreadful conflicts in the breast, with so little apparent effect on the corporeal fabric.

Hatfield. This is the man who fired at his majesty in Drury Lane Theatre, in the year 1800. It is curious that he was incited to this act by a fanatic who now inhabits the same asylum. Wounds which he had received in his head, in the public service, appear to have laid the foundation for his mental alienation, when he was persuaded to attempt the king's life to fulfil a prophesy of Bannister Truelock, a monomaniac to be noticed presently. This man, for a long time past, has evinced no symptoms of insanity; but his mind is soured, and he is discontented with every thing around him. Being a state-prisoner, he will, of course, continue in his present abode for life.

Truelock. This man, who was a shoemaker, having taken it into his head that the Messiah was to proceed from his mouth, in the same way that Johanna Southcote was to produce him from the uterus, persuaded Hatfield that the only obstacle was the king, who was first to be dispatched. He is a most singular character, and betrays no symptoms of insanity, unless the subject of Religion is touched upon, when adieu to all reason.

Mr. Thomas Lloyd. This unparalleled compound of cunning, pride, wit, impudence, lies, filth, and phrenzy, was formerly a corn-factor in Mark-lane, and furnishes perhaps the most remarkable character that the annals of Bedlam are ever doomed to record. A whole volume could scarcely contain a tenth of his eccentric operations from day to day. We cannot attempt to convey any idea of this non-descript lunatic to our readers. We shall only introduce a single extract as a sample.

"In the universality of his genius, he considers himself the most sublime poet that ever courted the muses, and whenever he can procure a scrap of paper, he proceeds to compose verses; but as those extemporaneous productions do not usually please his critic fancy, he converts them to ingredients in his gruel at breakfast, probably to enrich the soil of his genius for a new crop of heroics. This gruel is the common receptacle for a much greater variety of articles than usually go to the composition of turtle soup. He puts all his verses into it to cleanse them, as he says; and with a selection from the before-mentioned articles from his bosom, cheese from his snuff-box, butter from his tobacco-box, the exhausted quids from his mouth, sometimes a portion of another article which shall be nameless, bits of leather, small stones, pieces of bone, coals, &c. thus this epicure makes up for himself a relishing mess, somewhat a-kin to the hell-broth of Macbeth's wizards, and setting all German cookery at defiance. In this filthy system

of culinary composition, however, he affects to proceed on scientific principles. Leather clarifies it; stones purify it; coals mineralize it; one article acidulates it; another gives it an alkaline virtue; a third, a high flavour. This mollifies it, that dulcifies it; the whole together makes it a delicious mess, and he swallows it with the *gout* of an Apicius. Sometimes his beer is enriched with the same ingredients; and though such is his daily practice, his health is not injured by it."

Lieutenant Traile. We are next presented with a melancholy contrast to the facetious and satirical Lloyd. Mr. Traile served, during the late Peninsular war, as lieutenant in the 95th regiment of foot, with honour and reputation as a gentleman and an officer. At the peace he was placed on half-pay, and his mind soon afterwards became much engloomed, partly from religious enthusiasm, and partly from imaginary apprehensions. He now became insane on a single point. He had a horror of death from poison in his food. He consequently came to the resolution of refusing all nutriment. Mr. Lawrence and Dr. Wright kept him alive for some time by forcing liquid food down his throat through a tube. On the 31st of March, 1822, he contrived to hang himself by means of his neck-handkerchief fastened to the wire guard over the door. Thus he illustrated a very curious pathalogical fact in the history of insanity—namely, *suicide from fear of death.*

William Holwood. It is very astonishing what exertions and apparent—we might say real—sufferings will be borne by those affected with nervous diseases, and yet without the constitution experiencing any material injury. Instances of this kind must be familiar to every experienced practitioner—and they are constantly leading the younger branches of the profession into false prognosis and unnecessary alarm. The maniac above-mentioned is an example. He is incessantly in action, night and day, "and yet it is astonishing how he has sustained so much exertion for so many years." He never seems exhausted—knows not what illness is—and appears at all times in robust health.

John Williams. We only notice this case to express our approbation of some sensible observations of the anonymous author of the work before us, relative to the order of the Board at Bedlam, that forbids the sale, and consequently the use of tobacco among the insane.

"There can be no question that the forbidding this article is founded upon the best intentions; but there are many of the patients here who from habits of ten, twenty, thirty, and even forty years' use of tobacco, in some shape or other, have contracted such an insuperable attachment to it, that they would much rather go without dinners than their beloved quid. Others prefer snuff, and those patients who have been long used to it are always discontented, fretful, and peevish, if debarred this comfort, either through the want of money to purchase, or the neglect of their friends to supply them with it. There seems to exist in the use of tobacco, as well as in madness, a pleasure which none but the infatuated know; and, trifling as the privation of those little enjoyments seems, it revives in the memory of the patients a sense of former grievances, gives them an idea that they are quite forsaken, renders them irritable, and has sometimes very injurious effects"

George Woods. This unfortunate gentleman was a surgeon, and consequently excites our sympathy in an unusual degree. His hallucination was, that he had undergone the fate of Abelard, and this loss was the subject of lamentation night and day. If any thing could excite our risible faculties, when such a melancholy subject as the loss of hu-

man reason is the topic, it is a scene which passed between poor Woods, his keeper, and a peeress who happened to be going round Bedlam in company with other ladies.*

This poor fellow, in allusion to the supposed loss of his testes, was constantly exclaiming "oh! my ——! what shall I do for my ——! they are gone! gone! for ever!

"The Lady, unable to comprehend his meaning, applied for explanation to the keeper; who, with some discreet presence of mind, told her ladyship that the poor patient was in the habit of collecting a quantity of pebbles, flints, and other rubbish about the airing ground, which he fancied to be emeralds, rubies, diamonds, and other precious gems; that it became necessary to take them away from him, in order to prevent the accumulation of such rubbish in the gallery; and that a recent privation of this sort was now the subject of his lament. 'Oh, poor man,' said her ladyship, turning to the patient, 'never mind them; when his lordship comes here again, he shall bring you some pretty ones which he has got at home; they will be much handsomer than those you have lost: so don't fret about them any more." But poor Woods, not at all satisfied with the promised alternative, answered with much displeasure, 'that won't do! I will have none but my own.' And thus they separated, each unconscious of the other's meaning."

James W—l. We shall conclude our extracts with a passage from the case of this young gentleman, who was discharged cured in February, 1822.

"The character and symptoms of this patient's disorder were extremely curious and singular. When the paroxysm came on, however he happened to be situated, his whole frame, from head to foot, became stiff, as if all his joints and muscles were ossified. His eyes, though staring open, became fixed, and he foamed at the mouth. If sitting or walking when his fit came on, he would instantly fall to the ground, generally extended at full length, on his back, with the same symptoms of rigid stiffness and insensibility; his eyes, open and inclined upward, were insensible to the touch of a hand passed over them, which did not produce the slightest wink. No symptom of animation remained, with the exception of breathing; but this so faintly as to be scarcely perceptible. His condition in all other respects resembled death; and in this state he would sometimes continue for one, two, three, and even four days, without any apparent change. He could not be induced, on those occasions, to eat or take any kind of sustenance; except, under the direction of medical gentlemen, when rich broths were passed by injection sufficient to sustain nature; but of this he seemed quite unconscious. During the fits his whole person was literally as stiff as a plank, and he might be raised to a perpendicular, and carried from place to place like a ladder, without the least appearance of flexibility. Towards the termination of those paroxysms, when a hand was passed over the eye-balls they would sometimes move, which was a prognostic of his recovery; and, on being roused from his stupor, he recollected nothing of what had passed; but he would speak of dreams, visions, heaven, hell, and the strange things he had seen, at least with 'his mind's eye.' Visions which, with the fanatical disciples of Hannah Southcote, would have stamped him a sealed prophet, and sanctioned as divine revelations the wild dreams of his disordered fancy. After those fits he always appeared weak and dejected.".

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* We are not told whether it was curiosity or sympathy that first led the peeress to this melancholy mansion. Ladies, we conceive, should be prohibited from beholding such scenes and listening to such dialogues.

Just Published,—the History of Mexico, from the Spanish Conquest to the present Æra; containing a condensed General View of the Manners, Customs, Religion, Commerce, Soil, and Agriculture; Animal, Vegetable, and Mineral Productions; a Concise, Political, and Statistical Review of the Changes effected in that Country, with its present Form of Government, &c. —Also, Observations, Speculative and Practical, as to the best Means of Working the Mexican Mines, by a Combination of British Talent, Capital, and Machinery. By Nicholas Mill, Esq. *(Sherwood, Jones, and Co. pp. 282.) With a Map.*

Among the various works published relative to the southern cou-

tinent of America, we have hitherto seen little or nothing interesting or authentic, relative to the present state of Mexico, if we except the writings of Humboldt, whose researches were concluded more than twenty years ago. Since that period, the change of system, and of affairs, with the innovations effected by a thirteen years' revolution, which had liberty and independence for its ultimate objects, afford transitions memorable and worthy of historic record.

Within the ordinary limits of a review, it would be impossible to grasp a sufficiency of the work before us, to convey, to our readers, any efficient estimate of its merits. We shall, therefore, content ourselves, in the first place, by observing, that our author has thrown his various, and no less interesting materials, into strict chronological uniformity, bestowing on each, as he proceeds, the *quantum meruit* of illustration.

Speaking of the *population, language, religion, manners,* and *customs,* it is stated, that " the population of Mexico, including the whole of the kingdom, does not much exceed 10,000,000: and that the people are divided into whites, consisting of CRIOLLOS or CREOLES, (born in the kingdom,) and CHAPETONES or GACHUPINES, EUROPEANS, AFRICAN NEGROES, and casts of mixed blood. The descendants of WHITES and INDIANS are called MESTIZOS. The descendants of WHITES and NEGROES, MULATTOES; and the descendants of NEGROES and INDIANS are called ZAMBOS; the former of whom, (the whites) are in possession of almost the whole of Mexico; the richest mines, the most fertile tracts of land, and the most productive plantations are in their hands; and some of them derive revenues from their estates far exceeding the most opulent European nobility.

Volcanoes; natural productions, animal, vegetable, and mineral; plants, grain, fruit, and rice; medicinal and aromatic gums; minerals and produce of the mines;—the local situation of the ores; method of working the mines; revenues (church and state); the history of the various intendencies, are laid down with much explicit minuteness.

The recent political history, and present government of Mexico, with the successes of Mina, &c. which forms an important feature of the work, contains, in itself, a fund of interesting information which cannot fail to be read with satisfaction.

With the exception of 250 soldiers shut up in a fortified rock, opposite to Vera Cruz, there is not now a Spanish soldier in Mexico; while, by a recent decree of congress, all the old Spaniards are ordered out of the country; and since the deposition of Iturbide, there have been no internal commotions of any kind; if the refusal of some towns, in one of the provinces, to send deputies to the general congress be excepted; but even that difference has now been satisfactorily arranged.

The future prospects of Mexico, which our author has so ably drawn, however gory the retrospect may appear, are truly flattering and encouraging.

" There is not any history in the world which presents such a horrid picture of bloody and exterminating warfare, as that practised during the revolutionary struggle in Mexico: and what will appear extraordinary is, that those unprecedented cruelties and barbarities were not commenced, as might have been expected, by the uneducated and oppressed Indians, in whom such conduct could have been tolerated, but by the implacable and ferocious European Spaniards; who, had they dared to have practised them in their own

country, would have raised the whole of Europe up in arms to chastise them for such a savage breach of the laws of war. Manifest as were the causes which led to the disorganization of things, springing as they did from a system of oppression and unnatural restrictions on commerce and mutual intercourse, we may look forward, with some degree of confidence, to the acts of a government practically conversant with the sources of her former misery, and determined to cherish her resources for the benefit of her population. Every member of her family may now expect to attain a just share in the administration of her laws—a due protection from them. Native Americans will no longer be excluded from those offices of government to which their industrious or aspiring talent may lead them.

"Agriculturists will not be forbidden to rear and reap the fruits of a generous climate and prolific soil; and the bowels of the earth will be made to yield their massive stores and reward the miners' toil."

After some very relevant disquisition on the narrow policy of Spain, in confining the agriculture and manufactures of the country to the mere wants of the people; and pointing out the injurious effects of such measures, &c., the advantages that will result to the present Mexican legislature, by their knowing how to appreciate their resources, and by a preservation of good faith with the mining companies, who are embarking their capital to assist Mexico in her difficulties, &c., the author states:

"That the present government has no debt, except the sum of £3,200,000 (a loan contracted for by Mr. Goldschmidt) and the arrears of the military; but it has recently negociated another loan with Messrs. Barclay, Herring, and Co. for 20 millions of dollars, to pay up all arrears due to the public servants and to individuals; to give an impulse to commerce and to industry, by repairing the public roads, and by forming new ones, &c."

We shall, for the present, conclude our remarks on the present state of Mexico, in the strong and prophetic words of the author; that, as they (the Mexicans) have "been furnished with the sinews of war, by the assistance of British merchants, they will be enabled to restore subordination amongst the troops, and enforce the payment of the just revenue of the state; and, when order and tranquillity shall once again be established, Mexico may look forward to a long period of sunshine and prosperity.

"Nihil tum populare quam pacem, quam concordiam, quam otium, reperiemus." Cic.

MEDICO-CHIRURGICAL VARIETIES, &c.

Case of Small-pox occurring Six Months after Inoculation.—A child, five or six years old, was inoculated with small-pox; and three months passed over without its health suffering: for three months more the child was affected each evening with considerable stupor, which disappeared during the night. A neighbour, imagining that the little patient was attacked with *effort à l'estomac*, advised the application of a plaster upon the epigastrium; when, *mirabile dictu!* the latent small-pox, which had lurked for six months in the system, made its appearance, and ran its regular course! The following *logical* surmises on this case are offered by M. Fermaud fils, a physician at Quissac, who, whatever may be his other qualifications, seems to be pretty largely tinctured with credulity;—"La nature a-t-elle eu besoin d'un temps aussi long pour le développement du virus variolique, et l'éruption qui s'est faite est elle due aux seuls efforts de la nature; ou bien *l'emplâtre, par sa force attractive, aurait-il été l'occasion de cette éruption, en portant les mouve-*

mens du centre à la circonférence?"—Nouv. Ann. Clin. de Mont., Nov. et Dec. 1822.

Morbid State of the Mucous Membrane of the Large Intestine.—M. Andral lately presented to the *Académie Royale de Médecine* the large intestine of a man who had laboured under chronic diarrhœa. From the ileo-cœcal valve to the rectum, the internal surface of the intestine was of a deep black colour. This colour resided in the mucous membrane, which, however, was of the usual thickness and consistence, with the cryptæ much developed. It blackened linen with which it was placed in contact: when macerated in water, it blackened it also, but did not regain its whiteness. M. Andral is inclined to believe that this black colour, which was very different from the brown tint of chronic phlegmasiæ, was the result of an accidental secretion similar to that which takes place naturally in the choroid.—*Archives Générales, Mars,* 1824.

Contraction of the Spleen.—From some experiments made by M. Defermon, one of the important caterers for the *Bulletin des Annonces* of Baron Ferussac, the spleen would seem to be capable of becoming contracted under the influence of different medicines possessing a direct action on the nervous system, such as strychnine, camphor, acetate of morphine, &c. In dogs, to which strychnine had been administered, the spleen, usually flat, rolled itself up in a spiral manner as soon as absorption commenced, and shewed very strong contraction. The action of camphor was different: the spleen, under its influence, became rugous on its surface, and exhibited granulations which augmented and diminished in volume, producing a degree of motion in the whole organ. M. Defermon announced his intention of describing the different contractions of which the spleen is susceptible, in a future memoir.—*Nouvelle Bibliothèque Médicale, Mars,* 1824.

Successful Employment of Iodine in Scirrhus of the Uterus. By Dr. Klaproth.—A female, aged twenty-five years, was attacked with scrofula during her infancy, of which, however, she was freed at the period of puberty, which took place at the age of thirteen: at this period her menstruation was regular, until seventeen, when she became pregnant: the delivery was difficult, the forceps being required to accomplish it. At twenty-two years of age she miscarried, and sustained a considerable loss of blood: four months afterwards the same thing happened. From this period the catamenia ceased, and in their place leucorrhœa, at first mild, supervened. Two years afterwards, this was accompanied with pain in the groins and heat about the sexual parts. Six weeks thus passed over without any means being employed; but at the end of this time they applied to M. Klaproth. On examination, *per vaginam*, he discovered an induration at the orifice of the uterus, accompanied with sensibility and heat. He ordered the tincture of iodine internally, in the dose of eight drops three times a day, and, externally, frictions with an ointment composed of digitalis, belladonna, and hyoscyamus. After the patient had reached the dose of twenty-eight drops of the tincture, the menstruation became regular, the leucorrhœa decreased considerably, and the heat in the sexual parts gradually diminished: at this period the supervention of nervous symptoms and considerable debility rendered it necessary that the medicine should be suspended, but it was soon afterwards resumed. At the expiration of some time, numbness and cramp again indicated its suspension. The tincture was, however, prescribed for several

months, but often suspended, and as often resumed; when the menstruation became regular, the induration at the cervix uteri almost wholly disappeared, the pain vanished, and the leucorrhœa vanished also. — *Revue Médicale, Mars*, 1824.

On the Employment of the Oil of Turpentine in Sciatic and other Neuralgiæ. By M. L. MARTINET.—In our last Number we briefly alluded to the observations of M. Laroche on this subject. M. Martinet has, in a small *brochure*, related several cases of neuralgia affecting the sciatic nerve and the upper extremities, which were successfully combated by the oil of turpentine. From these cases it results, that of thirty-six individuals labouring under acute as well as chronic neuralgia, twenty-six were completely cured, seven experienced considerable relief, and in three only, one of whom was affected with a mortal hip-disease, did the treatment fail. The use of the remedy produced but trifling inconvenience, and the common duration of the treatment was only six days.

Facts in Favour of the Contagious Nature of Croup.—We are not aware that any serious suspicion is entertained of this deadly disease being contagious or infectious. The two following facts, however, have led several practitioners in France, to entertain an idea that it may propagate itself under certain unknown circumstances; and, though very far from being decisive, they are worthy of being recorded, that inquiry may be excited on the subject. The first set of facts is recorded in a former number of the same Journal (11.625), and is stated on good authority.—A woman having endeavoured to re-animate her child, newly dead of croup, by blowing into its mouth, was seized four days afterwards with the febrinous form of laryngeal inflammation. The physician who attended her, and who relates the story, one morning, after examining her throat very narrowly, felt all day a gangrenous odour, and at night was also attacked with the same form of the disease.

The other set of facts furnishes better evidence. A child, three years old, was attacked with tracheal inflammation, running on to gangrene, and terminating fatally on the sixth day. A lady, who was very assiduous in her attendance on this child, took ill three days before its death, and died in the same manner, after five days illness. A child, who lived opposite the first patient, and who used often to visit him, was attacked on the day after his death, and likewise perished in twelve days. And, finally, the physician who attended the two last patients was seized, in his turn, with a very violent cynanche, which yielded, however, to general and local depletion, without running on to gangrene, as in the three other cases; for gangrene is a very rare termination of tracheal inflammation. *Archiv. gen. de Medecine, Dec.* 1823. 111. 536.

Singular Case.—"A pitman, at Newcastle-upon-Tyne, aged 19, going intoxicated two years ago (such was his own account) fell asleep in a field, and while insensible, his companions played him the mischievous trick of introducing through the urethra into the bladder, a small-sized horse-bean; nor was he aware next day of what had been done, till they told him. He shortly after began to complain in making water, and in June last, he was admitted into the hospital with symptoms of stone, sounded, and a stone felt. On the 24th of that month, he was cut, and a loose cohering rough-grained sandy stone extracted, which crumbled in pieces when grasped by the forceps. Nothing uncommon happened during the operation, and

all the fragments were supposed to be removed, though not to the entire satisfaction of the operator. The after symptoms were very moderate, the patient occasionally complaining of the pressure of something hard in the wound. On the morning of the seventh day, a gritty substance was felt at the neck of the bladder, on introducing the finger, and some fragments of stone brought away by the forceps, together with one half of a small horse-bean, and part of another half with a portion of the outer shell or covering. Next day, the remaining part of the bean passed by the urethra. In five weeks the man went out well.—*Edin. Med. Surg. Jour.*, p. 311.

On the Employment of the Sulphate of Quinine in a large Dose in the Intermittent Fevers of Italy. By M. Martinet.—From the observations of this gentleman, he has been led to the following conclusions:—1st, That the sulphate of quinine, administered in the quantity of from twelve to eighteen grains, in Italy, in quotidian and quartan fevers, has not stopped the paroxysm. 2d, That this medicine, on the contrary, when given to the extent of twenty or twenty-four grains, has completely succeeded. 3d, That its use, in this latter dose even, has never been followed by any unpleasant effect on the abdominal viscera, and that the patients have been thoroughly restored to health.—*Revue Médicale, Mars*, 1824.

Observations on the Use of Iodine. By M. Richond, of Strasburg.—After adducing a variety of cases in a *Mémoire* on this subject, Dr. Richond concludes that iodine is a stimulant to the surface on which it is applied, but that it has no particular stimulant property on the lymphatic system—that it is not a specific in scrofulous affections, which we believe no one ever imagined it to be—that it is not to be compared to mercury, as its action is local, whilst mercury is absorbed and may act favourably even when applied far from the seat of the disease—finally, that it may be usefully employed in inflammation of the urethra and swellings of a venereal character, provided that care has been taken to previously calm the inflammation of the part, and that the surface which is to receive it be in its natural condition. *Archives Générales, Mars*, 1824.

Emetine of the Violet or Violine.—At a late sitting of the *Académie Royale de Médecine*, Section of Pharmacy, M. Boully read a *Mémoire* on the analysis of the violet, *viola odorata*, from which it appears that the violet contains an active, alkaline, bitter, and acrid principle, similar to the emetine of ipecacuanha, which the author proposes to distinguish by the names of *emetine of the violet, indigenous emetine* or *violine*. This substance, according to M. Orfila, possesses very powerfully poisonous qualities.

It is somewhat remarkable, that the active and emetic principle of the violet, resides equally in the root, the leaves, the flowers, and even in the seeds. In each of these parts, it is found associated with different immediate principles, which modify its action on the animal economy.

The active principle of the violet was at first obtained in a state similar to the emetine of the ipecacuanha, possessing similar properties; but with this difference, that it was united to the malic acid, instead of the gallic acid which is found in the ipecacuanha.—*Journal de Pharmacie, Janvier*, 1824.

Formula for a Preparation of Magnesia. By M. A. Chevallier, Pharmacien.—The earthy taste which is left in the mouth by magnesia, when taken in powder or in a liquid,

induced M. Chevallier to endeavour to prepare a compound, in which it might be masked by some agreeable corrigent; for this purpose, he made use of chocolate in the following proportion:—

Chocolate, ʒ ij.
Sugar, ʒ v.
Pure Magnesia, ʒ j.

Form into lozenges of twenty-four grains each; which, although they contain an eighth part of magnesia, have not any disagreeable earthy flavour.

These lozenges have been used by many individuals with great satisfaction.—*Ibid. Février*, 1824.

On the Mortality, &c., of Paris.—M. Villermé has lately read a paper to the *Académie Royale de Médecine*, from which it would appear, that, notwithstanding all the horrors of our smoky atmosphere, London enjoys a greater degree of salubrity than Paris, so much boasted of by its inhabitants for the clearness of its atmosphere. The mortality of Paris is, at present, about one in 32°: in the seventeenth century it was one in 25 or 26; whilst, in the fourteenth, it was as high as one in 16 or 17.

Formerly, as in London, the number of deaths considerably exceeded that of the births; but now the contrary is the case. There are more boys born dead than girls; and yet, during the three first months after birth, more boys die than girls.

The month of June presents the *maximum* of conceptions, and the *minimum* of births: in March and April the greatest number of births occur; and after these in February and January.

The poor and rich occupy in Paris the extremes of the scale of mortality. In proof of this, M. Villermé places the twelfth *arrondissement* of the city, where there are the most paupers, in opposition to the first, where there are the most rich; the result of his calculations is, that it would not be far from the truth, to say, that of a given number of inhabitants, fifty die in the first *arrondissement*, and one hundred in the twelfth.

The annual proportion of births in the first *arrondissement* is about one in 32, and about one in 26 in the twelfth, and yet the proportion of children under five years of age is not greater in the latter—a proof that the poor produce more children than the rich, but take less care of them.

M. Villermé passes in review, year by year, the great events, political, moral, physical, &c., which have borne upon the people of Paris; from which he draws a conclusion to which almost all writers on political economy have arrived, that whenever a people are in any way suffering, the number of deaths augment, that of the births diminishes, and the mean duration of life becomes shorter. Whenever, on the contrary, the people are happy, the number of deaths diminishes, that of the births augments, and the mean duration of life increases.—*Rev. Médicale, Mars* 1824.

Case of Enormous Uterine Tumour.—By our intelligent friend, Mr. Callaway, we have been favoured with the following note of the dissection and previous history of a case of scirrhosity of the uterus, occurring in the practice of Mr. Burton Brown, of Stamford-street, Blackfriars, a practitioner of considerable information and experience, and one of the correspondents of this journal.

The woman, from whom the uterine tumour was removed, was 73 years of age, had enjoyed an uninterrupted state of health until the cessation of the catamenia, in her 45th year: she was a widow, and had never

been pregnant. The tumour in the abdomen was gradual in its increase, until the last year, when it rapidly augmented in size. She had never complained of pain in it; and the only inconvenience she experienced was from its size obstructing the descent of the diaphragm, and thus occasioning difficult respiration. The other viscera were healthy.

The tumour weighed 39lb. 12oz.

(Med. Repos.)

ON SYNCOPE.

SYNCOPE is that state in which the pulsations of the heart cease, before the action of the respiratory organs.

The heart may cease to beat either from organic lesions in its own structure, or in that of its vessels; or from being sympathetically affected by injuries in other parts; or from the operation of certain poisons; or from a shock of the general nervous system, as experienced in paroxysms of certain passions.

In ordinary fainting, it is evident that some slight and feeble motions of the heart still continue, although insufficient to produce a sensible pulsation in the more distant arteries; and, where this has continued for an unusual period, 'and the respiration has been so obscure as to escape common observation, the phenomenon has been eagerly seized by the admirers of the marvellous, and credulity has attached to its history, under the name of *trance*, circumstances of extravagance and mystery to which it can hardly be necessary to allude on the present occasion. But the motions of the heart may have ceased altogether; and, in such cases, it becomes a question no less interesting to the practical physician than to the physiologist, whether they can ever be restored?' and, if so, we have to inquire under what limitation, as to time, under what circumstances, and by what means? The views which have been already offered, respecting the pathology of syncope, will afford us considerable assistance in the solution of a problem so intimately connected with inquiries of forensic importance. It would appear, that, where the heart has ceased to pulsate, in consequence of the cessation of respiration, it can never again be set in motion; but that, where it has stopped from other causes, as from the operation of certain poisons, its muscular irritability not having been exhausted, its action may be occasionally revived. Where syncope arises from hemorrhage, we shall find, on dissection, that the heart and its great vessels are either empty, or contain only a small quantity of blood in their cavities; but, where syncope arises from other causes, the heart is seen distended to an unusual magnitude, and the blood in the left auricle and ventricle is generally of a more or less florid colour, and has not the hue of venous blood; a circumstance which depends upon the pulsation of the heart ceasing before the function of respiration, and which is the very reverse of what happens in death from suffocation, as we shall hereafter explain.

Violent passions of the mind very commonly produce syncope, which has in some instances terminated in death; we are, however, inclined to believe that, in fatal cases of this nature, the persons must have laboured under some organic affection of the heart, or its vessels. Philip V. died suddenly on being told that the Spaniards had been defeated, and, on opening the body, his heart was found ruptured.

Dr. Tissot relates also the case of the father of a numerous family, who, having lost his wife whom he tenderly loved, was suddenly seized with laborious respiration, and died at the end of two days; when the lungs were found gorged with blood, and

the heart ruptured. Now, in both these cases, it is probable that the muscular structure of the heart had been softened by previous disease. So, in the case of Mr. John Hunter, whose life was suddenly extinguished by mental emotion, the valves of the heart had been long in a state of disease; and, so well aware was he of the danger to which he was constantly exposed, that he had, for some time previous to his death, been in the habit of retiring from all those situations in which his passions were likely to be excited. It is said that the instances of death from sudden joy are more numerous than those from grief, probably because the effect of this latter passion is rather to retard than to accelerate the circulation. Sophocles, being desirous of proving that at an advanced age he was in full possession of his intellectual powers, composed a tragedy, was crowned, and died through joy. The same fate befel Philippides, the comic writer; thus, too, the Lacedemonian Chilon expired in the embrace of his son, who had borne away the prize at the Olympic games; and we read of Roman women who died in the same manner, upon seeing their sons return from the battles of Thrasymene and Cannæ. On the other hand, we might adduce much classical authority to show that death has frequently been the sudden effect of grief.

Montaigne relates the case of a German, who, after having performed great feats of valour, was killed at the siege of Osen; one of the general officers, having desired to see the corpse of so gallant a man, was conducted to the body, when he instantly recognized the features of his own son, and died on the spot. The record of our own times will furnish us with an instance in which an actor of celebrity suddenly expired, upon repeating a passage that contained a fancied allusion to the domestic affliction under which he was suffering.

Dr. Ozanam, in illustration of the influence of pain and terror in producing sudden extinction of life, relates the case of a middle-aged criminal, who, having throughout evinced extreme weakness and depression, expired on his way to the scaffold, and was stiff before he arrived at the place of execution, which was about seven miles distant.

In such cases of sudden death, from the operation of violent mental emotions, we apprehend that dissection will frequently demonstrate the existence of previous disease in some of the organs immediately essential to life; and we shall hereafter have occasion to refer to the influence of the passions in hastening the fatal termination of a chronic disease. On the present occasion, we introduce the following extremely interesting case, in confirmation of the position we are endeavouring to maintain: the case was originally published in the Transactions of the Physico-Medical Society of New York, by Dr. Valentine Mott; it afterwards appeared in the Journal Universel des Sciences Medicales, Avril 1819; and lately it has found its way into the Medical Repository of this country. A robust and plethoric female, aged twenty-two, long addicted to dissolute and intemperate habits, had complained for some time of slight and apparently rheumatic pains; but, within a day or two of the fatal event, she had been deserted by a man to whom she was engaged in marriage, in consequence of which her mind became very deeply affected. After having supped on the preceding night, she retired to rest as usual, and in the morning was found dead in bed: she lay in a bent position on the left side, and was hence supposed at first to be in a profound

sleep; neither the countenance nor the limbs were in the least distorted. On dissection, the pericardium was found to contain ten ounces of coagulated blood, and two of serum; the heart, on all sides being covered by it, was of ordinary volume, but much loaded with fat. At the summit of the aortic ventricle was discovered the breach from which the effused blood had issued; the parietes of the ventricle around the rupture were much thicker than in the natural state, and, on close examination, a very sensible fluctuation was distinguished, to the extent of an inch on one side of it, from which flocculi, of a cheese-like substance, were discharged on pressure. The pericardium also presented traces of inflammation.

We have here, then, a case in which a morbid change in the structure of the heart had existed for a considerable period, and which was suddenly brought to a fatal termination by an affection of the mind.

Before we quit the consideration of syncope, we have to notice a fatal variety of that disease, which well deserves the attentive consideration of the forensic physician, whose highest duty, let it be remembered, is the investigation of sudden death. It is described by Mr. Chevalier under the term *asphixia idiopathica*, in which the patient suddenly faints and dies: the essential circumstances of the disease evidently denote, says Mr. Chevalier, a sudden loss of power in the extreme vessels to propel the blood; in consequence of which the heart, after having contracted so as to empty itself, and then dilated again, continues relaxed for want of the return of its accustomed stimulus, and dies in that dilated state. On dissection, all the cavities of the heart are found completely empty, and the viscus itself in a state of extreme flaccidity.—*Paris and Fonblanque's Med. Juris.*

Dr. Knox *on the Structure and Functions of the Canal of Petit, and the Marsupium Nigrum.*

1. *Of the Retina.* The result of several inquiries which I have made into the structure of this membrane, with the microscope and otherwise, is, that the foramen centrale of the retina is a perforation of the pulpy membrane of the retina, which perforation does not extend to the internal membrane. The functions of this most extraordinary structure in the eyes of man, quadrumanous animals, and certain reptiles, are exceedingly mysterious, and have become, if possible, still more obscure, by the discovery of its presence in the chameleon.*

The anterior termination of the retina is shewn to be nearly as described in my former observations; but the capsules forming the canal of Petit have been described with a greater degree of minuteness, and, it is hoped, of accuracy. The internal ciliary processes (*Zonula ciliaris* of Zinn.) have been proved to be extremely vascular, and to communicate, by anastomosing vessels, with the *tunica vasculosa retinæ*: these structures exist in their highest degree of developement in man and quadrupeds, or, generally speaking, in the mammalia. In birds and certain fishes, another arrangement takes place; the vessels entering into the composition of the tunica vasculosa retinæ, and of the internal ciliary processes of the mammalia, are transferred to the marsupium or pecten: the inner membrane of the retina in these animals is no longer vascular, and seems hardly to exist as a mem-

* See a Memoir, entitled, "An Account of the Discovery of the Foramen Centrale Retinæ in the Eyes of certain Reptiles. By R. Knox, M. D." Mem. Wern. Soc. Vol. v. Part i.; also Vol. ix. p. 358, of *Brewster's Journal.*

brane; the complicated structure forming the capsules and canal of Petit has disappeared, and become so completely rudimentary, as to be denied by some anatomists. It is inferred from these and other data, that these are corresponding and analogous parts in the two classes of animals, viz. that the pecten in birds is the vascular portion of the retina, and of the canal of Petit, found only in the mammalia, the functions of which seem to be to secrete and nourish the vitreous humour.

2. *Of the Membrane of Jacob.*—Some speculations relative to this membrane, contained in the "Observations on the Comparative Anatomy of the Eye," more careful dissections have not confirmed. It was supposed, for example, that this membrane might be one of the sources of the pigmentum nigrum, but in the most minute vascular injections, prepared with the greatest care, no vessels can be traced to the membrane of Jacob. It is not wanting over the tapetum, as was imagined, but merely becomes transparent, thus altering very singularly its colour, according to the structure and colour of those portions of the choroid with which it is contiguous. Several facts seem to shew, that the membrane of Jacob is altogether inorganic, and analogous to the coloured portion of the *rete mucosum* of the skin.

3. *Of the Annulus albus.* This body proves to be vascular, and to have a structure somewhat analogous to the iris.

R. Knox.

CHEMICO-PHILOSOPHICAL MISCELLANY.

Mr. Brunel *on a new Plan of Tunnelling, calculated for opening a Road-way under the Thames.*

Mr. Brunel has stated, that the idea upon which his new plan of tunnelling is founded was suggested to him by the operations of the *Teredo*, a testaceous worm, covered with a cylindrical shell, which eats its way through the hardest wood; and has, on this account, been called by Linnæus *Calamitus Navium*. The same happy observation of the wisdom of Nature led our celebrated countryman, Mr. Watt, to deduce the construction of the *Flexible Water Main*, from the mechanism of the lobster's tail.

"The difficulties," says Mr. Brunel, "which have opposed themselves to every attempt that has been hitherto made to execute a tunnel under the bed of a river, have been so many, and so formidable, as to have prevented its successful termination in those instances where the attempts have been made.

To propose, therefore, the formation of a tunnel after the abandonment of these several attempts, may appear somewhat presumptuous. On inquiring, however, into the causes of failure, it will be found that the chief difficulty to be overcome lies in the inefficiency of the means hitherto employed for forming the excavation upon a large scale.

In the case of the drift-way made under the Thames at Rotherhithe, in 1809, the water presented no obstacle for 930 feet; and when a great body of quicksand gave way, and filled the drift, the miners soon overcame this obstruction, and were able to proceed until they were stopped by a second irruption, which, in a few minutes, filled it. Nothing comes more satisfactorily in support of the system that is adopted here, than the result of the operations that were

carried, under that circumstance, to an extent of 1011 feet, and within 130 feet from the opposite shore.

It is to be remarked, that, at the second irruption, on examining the bed of the river, a hole was discovered 4 feet diameter, 9 feet deep, with the sides perpendicular — a proof that the body of quicksand was not extensive; but what is most remarkable is, that this hole could be stopped merely by *throwing from above, clay partly in bags and other materials:* and after pumping the water out under a head of 25 feet of loose ground, and 30 feet of water, the miners resumed the work, and proceeded a little further; but finding the hole at the first irruption increased, and the *filling* over the second very much sunk, the undertaking was abandoned.

The character of the present plan consists in the mode of effecting the excavation, by removing no more earth than is to be replaced by the body of the tunnel, retaining thereby the surrounding ground in its natural state of density and solidity.

In order so to effect an excavation 34 feet in breadth by 18 feet 6 inches in height, the author of this plan proposes to have the body of the tunnel preceded by a strong framing of corresponding dimensions. The object of this framing is to support the ground, not only in front of the tunnel, but, at the same time, to protect the work of excavation in all directions. The body of the tunnel, which is to be constructed in brick, is intended to be fitted close to the ground; and, in proportion as the framing is moved forward, so the brick-work is made to keep pace with it. But as this framing could not be forced forward all in one body, on account of the friction of its external sides against its surrounding earth, it is composed of eleven perpendicular frames, which admit of being moved singly and independently of each other, in proportion as the ground is worked away in front. These several frames are provided with such mechanism as may be necessary to move them forward, as well as to secure them against the brick-work, when they are stationary. It is to be observed, that six alternate frames are stationary, while the five intermediate ones are left free for the purpose of being moved forward when required; these, in their turn, are made stationary for relieving the six alternate ones, and so on.

In order that a sufficient number of hands may be employed together, and with perfect security, each perpendicular frame is divided into three small chambers, which may properly be denominated cells. By this disposition, 33 men may be brought to operate together with mechanical uniformity, and quite independent of each other. These cells, which are open at the back, present in front, against the ground, a complete shield composed of small boards, which admit of being removed and replaced singly at pleasure.

It is in these cells that the work of excavation is carried on. There each individual is to operate on the surface opposed to him, as a workman would cut out a recess in a wall for the purpose of letting in a piece of framing; with this difference only, that, instead of working upon the whole surface, he takes out one of the small boards at a time, cuts the ground to the depth of a few inches, and replaces the board before he proceed to the next. When he has thus gained from 3 to 6 inches over the whole surface (an operation which it is expected may be made in all the cells nearly in the same time), the frames are moved forward, and so much of the brick-work added to the body of the tunnel. Thus entrenched

and secure, 33 men may carry on an excavation which is 630 feet superficial area, in regular order and uniform quantities, with as much facility and safety as if one drift only of 19 feet square was to be opened by one man.

The drift carried under the Thames in 1809, which was about the size of these cells, and was excavated likewise by only one man, proceeded at the rate of from 4 to 10 feet per day. In the plan now proposed, it is not intended that the progress should exceed the rate of 3 feet per day, because the work should proceed with mechanical uniformity in all the points together.

With regard to the line of operation, if we examine the nature of the ground we have to go through, we observe under the third stratum, which has been found to resist infiltrations, that the substrata, to the depth of 86 feet, are of a nature that present no obstacle to the progress of a tunnel; we are informed that no water was met there. It is therefore through these substrata that it is proposed to penetrate, and to carry the line that is to cross the deep and navigable part of the river, leaving over the crown of the tunnel a head of earth of from 12 to 17 feet in thickness, quite undisturbed.

Admitting that, in descending to, or in ascending from, that line, we should come to a body of quicksand, such as that which was found within about 200 feet from the shore, it is then we should find in the combinations of the framing, before described, the means that are necessary for effecting, upon a large scale, what is practised on a very small one, by miners when they meet with similar obstacles. Indeed, were it not for the means of security that are resorted to on many occasions, mines would inevitably be overwhelmed and lost.

Although we may encounter obstacles that may retard the daily progress of the work, it is with satisfaction we contemplate that every step we take tends to the performance and ultimate completion of the object; and if we consider that the body of the tunnel must exceed the length of Waterloo Bridge, it must be admitted, that if instead of two years, three were necessary to complete the undertaking, it would still prove to be the most economical plan practicable for opening a land communication across a navigable river.

In order to execute the tunnel beneath the Thames by the method described in the preceding paper, it is proposed to raise a capital of £160,000 by transferable shares of £100 each. The following are the heads of expence:—

Preparatory expences	£ 9,000
Expences of the execution of the work, which will require two years	24,000
Expence of materials.....	87,000
Purchase of ground.....	20,000
Unforeseen expences	24,000
Total....	£166.000
Value of steam-engine, &c.....	6,000
	£160,000

Memoir on the Structure of the Monocotyledones.—The author of this memoir, T. Lestiboudois, Professor of Botany at Lille, is already well known by a Dissertation, which he published in 1819, on the family of Cyperaceæ, and in which he has not only traced the characters of all the genera belonging to this class hitherto known, but has proposed the establishment of several new genera. The memoir which we at present announce, relates to the anatomical structure of the stem of the Monocotyledones. It is well known that the stem of unilobous plants is not organized, and does not grow in the same manner as that of the dicotyledonous plants.

In place of presenting, like these latter, a regular succession of ligneous strata, circularly arranged and enclosed the one within the other, around a central canal, destined to contain the medulla, the stem of a palm, or other arborescent monocotyledon, presents only a mass of cellular tissue, in the midst of which are scattered ligneous fibres in irregular bundles. It is by the formation of new layers, which are annually added to the outer surface of the ligneous body, and to the inner face of the cortical body, that the dicotyledones grow in thickness. In the monocotyledones, on the contrary, the growth takes place by the centre of the stem. In the former there exists two different systems, the one, central or ligneous, which grows externally; the other, external or cortical, growing internally. There are therefore in these vegetables two sources of growth, while in the monocotyledones there exists but a single system, and a single focus of growth; and as this one system grows internally, as has been proved by the beautiful observations of M. Desfontaines, the author of the memoir thinks that it is the same as the cortical system of the monocotyledones. From whence is derived the conclusion, that the stem of palms, and of all other unilobous vegetables, is organized like the bark of the bilobous trees. On this account, he says, the dicotyledones might be called *Digènes*, because they have two surfaces of growth; the monocotyledones, which have only one, might be named *Monogènes*; and the agamic or cryptogamic plants, *Agènes*.—*Bullet. Universel.*

Occasional Abundance and supposed Migrations of Field-Mice.—Field-mice appeared in extraordinary numbers in Morvern, about the year 1809 or 1810. They were first observed in the month of August, and disappeared during the ensuing winter. They were most numerous in the north, on Loch Sunart side of Morvern, where the country is wildest and most rugged, and where there is least arable land. On the coast of the Sound of Mull, their numbers were comparatively trifling. They also infested the districts of Sunart, Ardnamurchan, Moidart, Arisaig, and Ardgour. In Morvern, during the months of August and September, any spot of fine pasture in the hills was cut in roads, close to the ground. The grass cut by the root lay withered. Bushes were also cut by the root, in the same way; and the white interior substance gathered in heaps for nests. About the end of October and beginning of November, in woods and low grounds preserved for winter grazing, the grass was found cut in the same way as in the hills. The bark of young wood was frequently gnawed off, and the ground perforated to such a degree, in making their subterraneous residences, that it often yielded to the foot in walking. These subterraneous residences, it is supposed, were intended for winter quarters. It was observed, that the nests of the mice, above and below ground, all communicated with each other, by an amazing number of these cross-roads, formed by cutting the grass close to the ground; and every nest was invariably connected, by means of these roads, with some place where there was water. In Morvern, and it is believed in every quarter which the mice infested, they were most numerous in those farms where there is least crop; and, upon the whole, they destroyed much less crop than grass. This did not proceed from a want of relish for corn diet; for, in one farm in Morvern, where there

is very little arable ground, the crop was completely destroyed. Even every square foot of the roof of the barn was perforated; and a great many of the stobs (sharp-pointed rods for fastening the thatch), nearly cut through. It has been observed, that mice are more numerous during wet than dry seasons; and this season they are more numerous than usual. During the winter of the year in which they were numerous beyond all others, a long-continued and severe frost took place, and they then disappeared. It is supposed they perished from want of food or water. All opinions regarding the amount of damage done by these mice to the pastures, are mere conjectures, but it must have been very considerable. In one tenement in Moidart, having a stock of 2000 sheep, it was estimated as equal to that of 300 sheep of an over-stock. In Ardgour, on the grounds around Col. Maclean's residence, the mice destroyed an immense number of fir-plants, and other young trees, by eating away the bark a little above the root. So bent were they here on mischief, that old women, with cats, were stationed at different points, in huts, through the plantations; at least, it is generally reported that such was the case. It is not likely that these establishments could give any effectual check to their depredations. It is not probable that there was any thing like an *invasion* of this country by the mice, at the time they were so uncommonly numerous. It is more probable, that there was something in the season peculiarly favourable to their increase. There are always a considerable number of field-mice in the woods, where they live by hoarding up, under ground, great quantities of hazel-nuts; and in soft moist ground, where there is long rank grass, or where the ground is coated with moss or fog, many of their nests and roads may be found under cover of the moss or grass. No facts occurred that would lead one to suppose that they migrate from one district of country to another

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WATERTON *on Preserving the Skins of Birds Beasts and other Animals; and the Bill of the Toucan.*

[Concluded from p. 80.]

To preserve the Bill of the Toucan in its natural brilliant colours.—The bill of the Toucan, immediately after death, loses all its beautiful colours, and becomes black. Hence we see, in cabinets of Natural History, the bills of Toucans *painted*, as near as may be, of their natural colours, though, indeed, very far short of their native brilliancy.

Mr. Waterton found that this black appearance was owing to the bony or horny cellular parts within the beak becoming black; and *that the colours still remained in the beak itself as perfect as ever.* He therefore drew out those black cellular parts; and coated the beak, within-side, with a mixture of whiting and gum-arabic in water; which caused the colours again to bear out. He then replaced the internal parts, and closed the joinings with wax.

The tongue of the Toucan, which is a very curious object, is also perfectly preserved by applying to it the antiseptic solution.

We have seen specimens of the Toucan, and other birds, in the collection of his grace the Duke of Northumberland, preserved in this manner by Mr. Waterton; which greatly exceeded in beauty any we ever saw before.

On preserving the Skins of Beasts.—Mr, Waterton preserved these subjects in South America (where, owing to the warmth of the climate,

unless they are rapidly dried in the sun, or before or over a fire, they speedily putrify,) either by wetting them with the antiseptic solution, or dipping them into it, and then drying them. They were thus also effectually secured from the depredations of insects, &c., without the least injury to their colours, or danger of the hair, fur, &c. coming off. Indeed, so little does the solution corrode animal matters, that woollen garments, on which it had been accidentally dropped, continued for years as perfectly sound as before. We have had in our possession, ever since the year 1816, a specimen of part of a leopard's skin, which had been preserved by Mr. Waterton in the above manner; it is yet perfectly pliable; the hair as firmly adhering to it, and of as beautiful colours, as when first received: and we have also seen the entire skin of a fox thus beautifully preserved by him.

On preserving the Skins of Snakes.—Mr. Waterton effects this, either by skinning the snake, sewing up the seam in the skin, and then stuffing it with cotton wetted with the solution diluted; or, otherwise, by extending it, wetting it with the solution, and allowing it to dry. By the latter method, he preserves the skin in a coiled-up state, like a riband; the beautiful colours of the scales being as perfect as ever. One of these last he shewed us, when last we had the pleasure of seeing him.

On preserving the Skins of Insects.—This is effected by taking out the entrails, and stuffing the skin, in its natural shape, with cotton moistened with the antiseptic solution.

Waterspout near Genoa, in 1823.—In the communes of Quigliano and Valeggia, in the province of Savona, a heavy rain fell on the 16th September, at 5 o'clock in the morning. It increased to such a degree, that, at 9 o'clock in the morning, the country was inundated. Towards noon there issued from a mountain, situated in the parish of Valeggia, a whirlwind of black smoke and fire. It first carried off the roof of a house, in which two children were crushed to pieces, and the parents wounded. The waterspout then advanced to the opposite side of the mountain, called Magliolo; crossed the river, the waters of which it heaped up in an instant, though they were much swelled;—carried off the roofs of two inhabited houses, and advanced along the same mountain in the district of Quigliano, where it dissipated itself near the Convent of Capuchins, situated in the village. It tore up many large trees of all kinds, and committed ravages, the extent of which is not yet known. The preceding account was sent by the commandant of the Province of Savona to the Governor of Genoa, in a letter, part of which is published in the *Moniteur* of the 1st October, and in the *Bibl. Univers.*, Nov. 1823, p. 135.

On the Hydrioduret of Carbon.—This substance, discovered by M. Serullas, is a solid, which crystallises in brilliant scales, and has a specific gravity nearly double that of water. It is of a citron yellow colour, with a sweet taste. It is insoluble in water, but soluble in 80 parts of alcohol, at 33° centigrade, the ordinary temperature, and in 25 parts at the temperature of 35°. It is soluble in seven times its weight of ether. It is readily dissolved by the fat of volatile oils.

One gramme of it consists of,

Iodine,	0·8991 gramme,	1 atom.
Carbon,	0·0864 gramme,	2 atoms.
Hydrogen,	0·0144 gramme,	2 atoms.

M. Serullas has found, that this

salt may be obtained in abundance, by simply treating an alcoholic solution of iodine by an alcoholic solution of potash of soda.—*Journal de Pharmacie*, November 1823, p. 514-520.

NUISANCES,

Subject to Medical and Chemical Investigation, extracted from PARIS *and* FONBLANQUE'S *Work on Medical Jurisprudence.*

[Concluded from p. 89.]

"(7) The manufacture of Prussian blue is necessarily attended with highly offensive vapours. The first part of the process consists in mixing hoofs and tups' horns with Russian or American potass, in large iron stills, to which heat is gradually applied, until the vessel become red-hot; the animal matter and alkali being thus fused into a mass is laded out into iron pans, where it concretes into solid blocks, technically called *metals*.

"(8) The operation of unfolding the cows' horns by the application of heat, is attended with a terrible stench; the trade in lanthorn leaves was formerly very considerable with Russia; but it was nearly annihilated by an edict of Catherine; the less flexible parts are made into combs; and the tips of the horns are sent to Birmingham for the manufacture of buttons.

"(9) Owing to the viscid nature of the materials, it is impossible to make varnish without burning the animal matter, which occasions a stench of the most insufferable kind, and is so suffocating, that very lately two workmen lost their lives in a manufactory of this article in Gray's-inn-lane.

"(10) The animal matters employed in this process give rise to a stench which has repeatedly formed the ground of indictment. The most nauseous part of the trade, however, consists in concentrating the waste lees, for the purpose of obtaining by fusion, in a reverberatory furnace, an article which is called BLACK ASH, and which contains, amongst other salts, the *sulphuret of soda*.

"(11) Renderers of tallow, are persons who convert the butcher's fat, &c. into tallow.

"(12) The process of smelting different ores is the most injurious of all the operations of art, although to the senses it may be less nauseous than those in which animal matter undergoes decomposition by heat, or putrefaction. These evils, however, by the ingenious application of various mechanical and chemical expedients, have in many instances been very materially diminished, and in others entirely obviated; this is strikingly illustrated in several large works for smelting lead ores; and the proprietors of the Hafod copper-works, at Swansea, are at present engaged in an experimental inquiry into various plans which have been proposed for diminishing, or preventing, the ill-effects which arise from the metallic fumes. Acquainted as we are with the liberality and science of these gentlemen, we have little doubt of the result; and we mention the circumstance in this place in order to recommend similar efforts on the part of persons engaged in other works; and, at the same time, for the purpose of preparing the reader for some observations which we shall take occasion to offer on the subject of the law of nuisance, in relation to its operation in stopping works of such national importance. It would be premature to enter into any detailed account of the chemical means which promise a successful resource on this occasion; we shall only observe, that the great mischief seems to arise from the quantity of arsenic so universally present in the ores of copper; and there is reason to hope, from the experimenis already

made by Mr. J. H. *Vivian*, that *lime* may be usefully employed in preventing its volatilization. The author of the present note has had ample opportunities of investigating the effects of arsenical fumes, which arise from the burning-houses in Cornwall, and from the great copper-works carried on at Hayle, in that county, and they appear to be especially pernicious to graminivorous quadrupeds; horses and cows lose their hoofs; and the latter animals are not unfrequently seen, in the vicinity of the works, crawling along on their knees; they are also subject to a cancerous affection in their tails; and milch-cows lose their milk. The herbage also suffers materially from the poisonous smoke, especially in wet seasons; corn is blighted in the ear, and never perfects its seed, unless care be taken to select at that period such ore as will yield but little sublimate. Cabbages do not appear to suffer in the least; nor are potatoes materially injured; and it is not the least curious circumstance in the history of these works, that the apple-trees in their vicinity grow and bear fruit without sustaining any of those ill-effects which we should have anticipated, but, on the contrary, the arsenical fumes appear to destroy all the insects which usually infest such trees, and their trunks exhibit a cleanness which would delight the horticulturist. The men employed in these works are occasionally affected with a cancerous disease in the scrotum, similar to that which infests chimney-sweepers; it is, however, probable, that this arises from the immediate application of the excoriating material made by the hand in the act of rubbing the part. A similar affection was a short time since observed in a manufactory, in which the workmen were engaged in making an arsenical solution for a green dye, used in calico-printing.

"(13) Gas Works. We have lately learnt, that a method has been adopted to get rid of the nuisance which has arisen from the residual liquor from these works, by evaporating it in pans, placed in the ash-pit of the furnace, and by which the iron bars of the fire-place are at the same time kept cool, and are therefore much longer preserved. The contrivance may be seen at the gas works in Worship-street.

On rendering Leather, Linen, &c. Water-proof. By M. M. Ferreman, and Thilly.—To 100lb. of the best linseed oil, are added 1½lb. of the acetate of lead; 1¼lb. of calcined umber; 1½lb. of white lead, and 1½lb. of very finely-powdered pumice-stone. These solid substances, well ground and mixed together, must be boiled in the oil for ten hours, over a moderate fire, to prevent the oil from burning. This varnish should be of such a consistence, that, when mixed with a third part of its weight of pipe-clay, it should be as thick as treacle. It is left to settle eight days, and is then to be passed through a lawn sieve. They then grind, in a solution of strong and clear glue, as much pipe-clay as amounts in weight to the tenth part of the oil employed, and mix to the consistence of ointment; adding the varnish by degrees, and stirring it well with a wooden spatula. This varnish must be repeatedly stirred, till it becomes perfectly fluid; and then the desired tint is given by adding a fourth part of the colour, ground in oil. The linen must be stretched upon a wooden frame; and the composition applied upon it, with a large spatula three inches broad and nine inches long. The frame is then inverted, and the operation re-

peated upon the other side of the cloth: it is then left to dry for a week, and separated from the frame for use. This cloth may be used for riding-hoods, covers for carriages, &c. &c.

For leather and skins the same composition is used; but to give the surface a smooth and brilliant appearance, the following varnish is employed; viz. 5lb. of the oil varnish, and an equal weight of well-clarified resin, are boiled together until the resin is dissolved; they then add 2lb. of oil of turpentine, having the colour to be given to the varnish ground with it, and passed through a lawn sieve: this is to be applied with a brush. When the varnish is thoroughly dry, it must be rubbed even with a pumice-stone and water, and be then washed clean. Two or three coats of varnish being then applied, and each coat suffered to dry for two or three days, is sufficient to produce a brilliancy equal to that of the Japan lacker.—(*Tech. Repos.*)

On an Improvement in the Process of Manufacturing Brandy from Potatoes. By M. Siemens, *Bailli, à Pyrmont.*—This process has been adopted in many parts of Germany; and, in the North of Europe, has received the approbation of two most scientific men; viz. M. Berzelius in Sweden, and M. Œrsted in Denmark; who have each recommended their Governments to encourage the introduction of it. Essays made at Copenhagen have proved, that the inventor has not exaggerated in saying, that by his method he could obtain one-third more of brandy than by the usual processes; and that it was of a good quality. From the report made on this subject, by M. Œrsted, we learn in what consists the chief importance of this discovery. The potatoes are put into a close wooden vessel, and exposed to the action of steam, which communicates to them a degree of heat greater than that of boiling water. Thus heated, the potatoes can be reduced to the state of the finest paste, with extraordinary facility: all that is required being, to stir them with an iron instrument armed with cross-pieces, and turned in a wooden vessel a few times; they then add boiling water to this paste, and afterwards a little potash, rendered caustic by quick-lime. This latter addition is intended to dissolve the vegetable albumen, which opposed the entire conversion of the potatoe-starch into a fluid. This fluid being filtered, is susceptible of being chemically treated. M. Œrsted has also employed himself in freeing the potatoe-brandy from the flavour which is peculiar to it: this he has effected by means of the chlorate of lime, which renders it equal to the best brandy made from wine.—(*Ibid.*)

Cheltenham Water.—Mr. Faraday has examined the water from the Orchard well, at the above place. A pint of this water yielded:

Carbonate of lime . . .	1·6
Sulphate of lime . . .	14·5
——— magnesia . .	12·4
——— soda . . .	3·7
Muriate of soda . . .	97·0
	129·2

Besides which the water contained a portion of carbonic acid; and a small quantity of peroxide of iron had settled at the bottom of the bottle. By using two tests suggested by Dr. Wollaston, this water was also found to contain small portions of nitric acid and potash.

On adding sulphuric acid to a portion of this water, in quantity abundantly sufficient to decompose all the salts subject to its action, and boiling the acidulated water in

a flask with a leaf of gold for an hour, the gold either in part or entirely disappeared, and a solution was obtained which, when tested by protomuriate of tin, gave a deep purple tint. Hence the presence of nitric acid, originally in the water, was inferred, and that no mistake might occur, a solution made in pure water of all the salts, except the nitrate found in the water, was boiled with some of the same sulphuric acid, and tested by the same muriate of tin; but in this case no colour was afforded, nor any gold dissolved.

The potash was ascertained to be present by evaporating a quantity of the water until reduced to a small portion, filtering it, and then adding muriate of platina in solution. Three pints of the water, evaporated until about an ounce of fluid remained, gave an abundant precipitate of triple salts of potash and platina. In cases where small quantities of the waters were tried, it was necessary to let the liquid stand an hour or two after applying the muriate of platina, but the triple salt always ultimately appeared.—*(Royal Institution Journal.* Vol. xvii. p. 179.)

ANALYSIS OF SILVER ORES.

In our first Number of the New Series, the corrected analysis of the dark grey silver ore should have stood thus:

Pure silver - - 35 grains.
Copper - - - 10 grains.
Lead in small quantity.
Iron in large quantity.
Antimony.
Sulphur.
Gangue or matrix, consisting principally of silex—in 600 grains of the pulverized ore.

Analysis of the *light grey* variety.

The constituent parts of this ore differ but little from the preceding, but contain them in less proportion, with the exception of more gangue or matrix.

Detonating Silver and Mercury.—Dr. Liebig has analyzed both these compounds, prepared by the well-known process of causing alcohol to act upon the nitrates of the respective metals. It appears from the experiments detailed, that the substance combined with the metallic bases is an acid, and separable from them by means of the alkalies and metals, and they then form the detonating compounds. To analyze detonating silver and mercury, 100 parts of each were mixed with 400 parts of calcined magnesia, and heated in a retort, the products received were:

	From detonating silver.	From detonating mercury.
Carbonic acid	35·5	25·8
Ammonia	13·7	10·0
Water	7·2	5·2
Silver	41·0	Mercury 56-9
Loss	2·6	2·1
	100·0	100·0

The above are the mean of four experiments; these give as the ultimate elements.

	Detonating silver.	Detonating mercury.
Oxygen	32·22	23·39
Hydrogen	3·22	2·34
Azote	11·28	8·23
Carbon	9·68	7·04
Silver	41·00	Mercury 56·90

The salts formed of the acid of these detonating compounds have been termed *fulminates*. With potash, the salt formed crystallizes in long brilliant plates, which do not affect tumeric paper, have a disagreeable metallic taste, and detonate when heated or struck. It consists of 85·08 acid, and 14·92 base. The fulminate of soda crystallizes in brown brilliant plates, it is more soluble in water than the fulminate of potash, but resembles it in other properties, and is composed of 88·66 acid, and 11·34 of soda. Magnesia, barytes, strontia, zinc, and copper, all combine with this acid to

form compounds.—(*Ann. de Chim.* xxiv. 294.)

To the Editor of the Medico-Chirurgical Review and Chemico-Philosophical Magazine.

A metallic substance of a white color resisting oxidation, and at the same time hard, malleable, fusible, and close-grained, has been much desired by metallists for taking the impressions of coins. Platina is infusible by common means, and silver tarnishes, these two metals are therefore improper—the alloys of silver and copper are all liable to oxidation, consequently useless. I tried a variety of compounds to obtain the metal required, but they were all more or less objectionable, on account of their deficiency of some one of the properties above stated. I at length found the following compound succeed perfectly.

Platinum	- -	7 parts.
Silver	- -	7 parts.
Copper	- -	7 parts.

This metal resisted oxidation, was fusible, malleable, white, and exceedingly close grained.

I need hardly add, that it will be very useful and beneficial to the arts. Your obedient servant,

NICHOLAS MILL.

April 14, 1824.

(The two following Communications are from the "Annals of Philosophy.")

Apparatus for producing Instantaneous Light. By the Rev. J. Cumming, M.A. F.R.S. Professor of Chemistry in the University of Cambridge.

Cambridge, April 15, 1824.

Dear Sir,

In the early part of last December, I exhibited to our Society, Dobereiner's experiment of the inflammation of Hydrogen in atmospheric air by precipitated platina; and from that time to the present have occasionally employed the same apparatus for producing an instantaneous light. The method I have used is so simple, that I should not have thought it worth communicating, if I had not been told that the instruments made in London for this purpose lose their effect after a few experiments.

Having removed the electrical apparatus from a Volta's lamp, I placed a fragment of precipitated platina between two pieces of watch-spring, which are inserted into a cork fitting into a small test-tube as a cap. The distance of the platina from the jet is about three-quarters of an inch, and a small wax taper is fixed about half-an-inch beyond the platina.

The only precautions I have found necessary are, to replace the cap immediately after each experiment, and to employ a pressure upon the hydrogen of not less than five or six inches of water. With a pressure of nine inches I have never failed in producing the same effect from platina-foil of $\frac{1}{9367}$ inch in thickness, by using the precaution of keeping it in a closed tube; but when the thickness of the platina-foil was $\frac{1}{6440}$, it required to be previously raised to nearly a red heat.

The experiment of the aphlogistic lamp may be exhibited to great advantage by employing either precipitated platina or platina-foil suspended over the wick, instead of wire, as originally proposed.

I am, dear Sir, truly yours,

J. CUMMING.

P. S. By the kindness of our late Woodwardian Professor, Mr. Hailstone, I have been favored with some fragments of titanium formed in iron slag, for the purpose of ascertaining its place in the thermoelectric series; which I find to be

between platina and silver, but have not as yet been able to determine its precise situation with respect to the intermediate metals.

On the Nuttallite, a new Mineral from Bolton, in Massachussetts. By H. J. Brooke, Esq. F.R.S., &c.

Dear Sir. *April* 20, 1824.

I have received, from my friend Mr. Heuland, a small specimen of a mineral from Bolton, in Massachussetts, brought by Mr. Nuttall to this country.

It had been named elaeolite, I suppose from its exhibiting a play of light resembling that which is frequently seen in the fettstein from Norway, and from its colour generally approaching to that of the same mineral; some fragments are, however, nearly transparent and colourless. On examining the crystals, which are imbedded in carbonate of lime, I find that they differ both in cleavage and lustre from elaeolite, and that they are much softer. They present the form of *a right square prism*, which may be regarded as a primary, with cleavages parallel to its lateral planes. The lateral edges of this prism are replaced by single planes, but the terminal planes are imperfect.

It is softer and much more glassy in its fracture than scapolite, for which, on account of its form, it might be mistaken, and does not resemble any other mineral with which I am acquainted. I have, therefore, named it Nuttalite, out of respect to the gentleman who brought it to this country.

I hope, at some future period, to be enabled to describe it more fully than I do, from the minute crystals my specimen contains.

To the Editor of the Monthly Medico-Chirurgical Review and Chemico-Philosophical Magazine.

I have taken the liberty to forward you a curious receipt of an old alchemist, "Wherein is shewed how true and perfect gold may be made by art, with loss to the workman."

Thus I wrought—I took 8 oz. of regulus of iron and copper made as beneath is declared, and 16 oz. of common sublimate, bought at the apothecary's, and made these ingredients into fine powder; first severally, and then I ground them well together upon a marble stone, and so put them into a retort of glass, and drew from them, first, an oyl, then a substance like batter, and lastly, a yellow sublimate, tincted with the tincture of copper, which yellow sublimate I rectified three or four times, till all was very pure; then I mixed it with equal parts of an amalgam of silver and quicksilver, made as beneath is taught, and put into another retort of glass, and forced away all but the silver, which remained like yellow horn; this yellow silver I amalgamed again with new quicksilver, and set in a gentle heat about a week, then in a very strong heat for six hours; so that the quicksilver rose up and fell down again upon the silver, till such time as it had carried up all the silver from the bottom of the glass, into branches like trees; when I melted down the silver, and fined it, and parted it with aquafortis, and had divers grains of pure and good gold, abiding all trials; but the quantity would not pay for half the charges and labour.

I made the regulus thus:—I took 4 oz. of iron in stub-nails, and made them red hot in a crucible, and then I put to it 8 oz. of crude antimony, and melted it down, and when it was well and thin melted I let it cool in the pot, and so knocked off the regulus from the lop or cinder, which lay upon the top of it; then I did the like with 4 oz. of copper in thin plates; and then I mixed equal parts of these two,

and melted them down three or four times, every time casting into the pot half-an-ounce of saltpetre, as it was in melting, to purify it till it was pure and bright as silver, but yet brittle, so that I could beat it in a mortar to fine powder. The yellow silver, that was like yellow horn, did amalgam with much difficulty and grinding, with salt and vinegar, and some of it was lost do what I could; but the first silver, which I bought at the refiners, out of which they had taken all the gold before, this did amalgam very easily; then I strained it to a ball through a leather skin, and so mixed it with the yellow sublimate, that was tincted yellow, with the tincture of iron and copper. The proportion of the quicksilver to the silver was five or six parts to one. If any one doubt the truth of alchymy, he may be satisfied by this trial; but, instead of gain, he shall pay for his learning by going away with loss. I do not deny but there are works of less loss and charge, yet none of them lucrous, by reason of the change of times; for if any one will uphold me as good a lease, or purchase of land, as I can prove, by credible records, hath been had in former times for an ounce of gold, I will undertake to make an ounce of gold by art to pay for it, and yet have a good bargain: but the differences of times hath confounded this art, as may appear more plainly beneath.

First—In ancient times a man's work was not worth a penny a-day, which now is worth two shillings and sixpence a-day, as may appear by ancient records for buildings and the like; so that there is thirty to one loss in the workmanship.

Secondly—Then coals, vessels, and other things necessary for these affairs, did cost little in respect to the charge now.

Thirdly—When the gold was made, it would then have brought thirty or forty times as much, either lands, leases, victuals, or workmanship as now.

So I conclude, that then the owners of this art might gain thirty or forty for one, and yet now they shall lose extremely.

Your obedient servant,

VETUSTAS.

PHILOSOPHICAL SOCIETIES, &c.

ROYAL SOCIETY.—*March* 4 *(continued)*—"Some further particulars of a case of Pneumato-thorax; by J. Davy, M. D. F. R. S."

Dr. Davy's hopes of the favourable termination of the case of Pneumato-thorax in which tapping was resorted to, as described in the Appendix to his paper in the Philosophical Transactions for 1823, had proved fallacious;—the patient had died; and the object of the present paper was briefly to detail the progress of his disorder, and to give the examination of the air found in the chest.

About a month after the date at which the history of the case in the Philosophical Transactions terminates, hydro-thorax supervened, and it was likewise found that air was collected in the left cavity of the chest. A consultation being held upon the case, a second operation was determined on. Dr. Davy having experienced inconvenience in penetrating the intercostal space, adopted the method of perforating a rib, mentioned by Hippocrates. Part of the fifth rib was accordingly laid bare by the scalpel, then bored through by a carpenter's augur, and the pleura penetrated by a trocar: about fourteen ounces of clear fluid were obtained, containing albumen, and a little sub-carbonate of soda, but no free carbonic acid; the succeeding portions, however, were more and more purulent, and contained gas. The total quantity of fluid thus obtained in the course of six weeks amounted to twenty pints. By means of a trocar and bladder, air was obtained from the aperture at three several times; and being examined by lime-water and phosphorus, was found to consist of from 88 to 90 per cent. of azote, 2 to 4 carbonic acid, and 3 to 5 oxygen. The patient was at first much relieved by the operation, and seemed to be

recovering: but he eventually became worse, and died; evidently, from the mere effects of the disorder.

On the examination of the body after death, six ounces of pus were found in the right pleura; the right lung at first appeared healthy, but upon minute examination a number of granular transparent tubercles were found disseminated through it. The left lung was much condensed, so that it could not be inflated by blowing with a pair of double bellows attached to the trachea; it communicated with the pleura by two small openings. The heart was displaced, having been thrown to the right side, obliquely on the spine. The body having been opened in a bath, 170 cubic inches of gas were collected from it, containing 16 per cent. of carbonic acid, and a little oxygen; the residue being azote. This, Dr. Davy presumed, was atmospheric air, deteriorated by respiration, and altered by the absorption it had undergone while in the body. He had found in the lungs, after death, in various cases, from 9 to 12 per cent. of carbonic acid.

March 18.—The Lord Bishop of Limerick was admitted a Fellow of the Society, and the name of the Earl of Orford was ordered to be inserted in its printed lists.

A paper was read, entitled, "An Account of Experiments on the Velocity of Sound, made in Holland. By Dr. G. A. Moll, and Dr. A. Van Beck."

March 25.—Major-general Sir John Malcolm, G. C. B. was admitted a Fellow of the Society; and a paper was read, on the Geological Distribution of Fossil Shells, in continuation of that already published in the Philosophical Transactions, by L. W. Dillwyn, Esq. F. R. S.

April 1.—The reading was commenced of "An Inquiry respecting the Nature of the luminous Power of some of the Lampyrides; *L. splendilula* or glow-worm, *L. Italica*, or fire fly, and *L. noctiluca*, by Tweedie John Todd, M. D.; communicated by Sir E. Home, V. P. R. S.

April 8.—The reading of Dr. Todd's paper was resumed and concluded.

Medical Society of London, *Bolt-Court.* — The "Fothergillian medal," a gold medal, value twenty guineas, offered, annually, by the Society, for the best Essay on a subject proposed by them, will be presented, at the anniversary meeting of the Society in March, 1825, to the author of the best Essay on "The Pathology and Treatment of Periodical Asthma."

Each Dissertation must be delivered to the Registrar, in the Latin or English language, on or before the first day of December.

For the other conditions of this prize we refer to our Number for April, 1823.

Fothergillian Medal. — We have much pleasure in stating, that the Fothergillian gold medal has been conferred, by the unanimous suffrages of the Committee of Papers, on Mr. Bampfield, for his Essay on Diseases of the Spine.—Our readers will remember, that Mr. B. published his views on this subject in a series of valuable Papers, which appeared in our Journal last year.

Linnean Society.—*Dec.* 16, 1823.—The reading of Mr. Murray's paper on the *Lampyris noctiluca* was resumed and concluded; and the following communications were read.

"Observations on some of the terrestrial Mollusca of the West Indies; by the Rev. Lansdown Guilding, B. A. F. L. S." Among the species described in this paper were *Helicina occidentalis*, corpore livido, dorso tentaculisque atris, oculis prominulis.—In montibus sylvosis Sancti Vincentii; *Bulimus hæmostomus*, corpore olivaceo-nigro, corrugato: pede subtus pallido; capite bifariam crenato.—In dumetis Antillarum; *Bulimulus stramineus*; and *Pupa undulata.*

"An account of some rare West Indian Crabs;" by the same. The Society then adjourned to January 21, 1824.

Feb. 3.—Among the presents received at this meeting was a Collection of Plants, made by Lieut.-Col. Wright, of the royal engineers; during a journey through Circassia, Persia, and Georgia.

A notice by Mr. John Hogg, of Norton, Durham, was read, stating that a fine specimen of *Falco chrysaëtos*, or golden eagle, was lately shot near the mouth of the Tees; being the fifth known to have been killed in England.

The reading of Mr. Vigors' extended paper was then resumed and continued; and it likewise occupied the attention of the Society on *Feb.* 17, and *March* 2.

March 16.—The reading of Mr. Vigors' paper was also continued at this meeting; and the following other communications were read.

"Description of *Erythrina Secundiflora.* By Don Felix Avellar Brotero, Emeritus professor of botany in the university of Coimbra; for mem. of the Society."

"On the insect called *Oistros* by the ancient Greeks, and *Asilus* by the Romans. By W. S. Mac Leay, Esq. F. L. S. communicated by the Zoological Club of the Linnean Society." In this paper, which may interest the lovers of classical antiquity as well as of natural history, Mr. Mac Leay has produced many interesting proofs that the *Œstrus* of the ancients,

"————cui nomen *Asilo*
Romanum est, *Œstron* Graii vertere vocantes." (Virg. Geor. II.)

was not the insect to which the name is now given; but a *Tabanus*. Olivier first observed, that it was different from the *Œstrum* of the moderns. Pliny uses the name *Tabanus* or the Μυωψ, which Aristotle says is nearly related to *Œstrus*, both being εμπροσθεννευτρα; it cannot therefore be the modern *Œstrus*: he also says, that both are bloodsuckers, which agrees with the Linnean *Tabani*, but is wholly inapplicable to the modern *Œstrus*. As the insect is too well known for its name to have been forgotten or misapplied, there can be little doubt that the Latin *Tabanus*, the Italian *Tabano*, Spanish *Tavano*, and French *Taon* are identical, which latter name Mouffet gives us the same with the English Breese, Clegg and Clinger, mentioned by Shakspeare, who, speaking of Cleopatra, says;

"The Brize upon her, like a cow in June,
Hoists sail and flies."

Some elucidation is also brought from Homer, and the Prometheus of Æschylus, and it is observed that Virgil describes the *Asilus* or *Œstrus* as abundant and *acerba sonans*, whereas our *Œstrus bovis* is a rare and silent insect. They were first confounded by Valisnieri, who has been followed by Martyn and others. It is inferred that Aristotle did not even know the latter, from his assertion that no dipterous insect has a sting behind.

April 6.—A letter was read, from the Rev. W. Whitear, of Harleston, in Norfolk, stating that a little bustard had been shot, in December last, at Little Clarton, in Essex. He considers it to be a curious fact that this bird, an inhabitant of a southern climate, should have been met with in this country, in winter.

A description was likewise commenced, of a collection of Arctic plants formed by Captain Sabine, during a voyage to the Polar seas, in 1823; by W. J. Hooker, LL. D. F. R. S. &c. Communicated by the council of the Horticultural Society.

April 20.—Sir T. Gery Cullum, Bart. F. L. S. presented some sections of fir-timber, pierced to a great depth by the *sirex juvencus* of Linnæus; together with specimens of the insect itself. They were from the woods of Henham Hall, in Suffolk, the seat of the Earl of Stradbroke, where two hundred Scotch firs have been destroyed by this insect; being bored through and through. The reading of Dr. Hooker's description of the Arctic plants collected by Capt. Sabine was continued.

A catalogue of the Norfolk and Suffolk birds, with remarks; by the Rev. Revett Shephard, A. M. F. L. S. and the Rev. W. Whitear, A. M. F. L. S. was read in part, and the remainder postponed to a future meeting.

Medico-Botanical Society.—*Feb.* 13.—Some observations were made on the Acacia Catechu. A paper was also read, on a bark termed the Malambo Bark, lately imported from America.

Feb. 27.—Some observations were read, on the alterations in the Pharmacopœia.

March 12.—A paper was read, intitled "Observations on the Anthroxanthum Odoratum; by T. Rowcroft, Esq. his Majesty's Consul General at Peru: communicated by Dr. Bree, President.

March 26.—Some observations were made on the Croton Tiglium; by Mr. Pope, of Oxford-street.

April 9.—A paper was read on the Resina Acaroides, by Mr. W. Bollaert.

Zoological Club.—The first meeting of this useful association was held in the apartments of the Linnean Society on the 29th of November last, the birth-day of our celebrated countryman John Ray. The Club is composed of members of the Society devoted to the study of zoology and comparative anatomy, and has been organized with the view of advancing the knowledge of those sciences, in all their branches, under the sanction of the Society. This body will not have any publications of its own, but will submit all original communications made to it to the Council of the Linnean Society, who will decide upon them as upon all other communications.

Before the Zoological Club proceeded to the election of their officers and the other business of the day, an admirable opening address, explanatory of the views of the association, was delivered by the Rev. W. Kirby, F. R. and L. S. who had been unanimously called to the chair.

The following members were then appointed to form the Committee and Officers for the management of the affairs of the Club for the ensuing year:—

Joseph Sabine, Esq. *Chairman*; J. F. Stephens, Esq. *Treasurer*; N. A. Vigors, Esq. *Secretary*; Rev. W. Kirby; A. H. Haworth, Esq.; Thomas Horsfield, M.D.; Thomas Bell, Esq.; E. T. Bennet, Esq.; G. Milne, Esq.

Geological Society.—*Feb.* 20.—A notice was read on the Megalosaurus, or great Fossil Lizard of Stonesfield, near Oxford; by the Rev. W. Buckland, F.R. S. F. L. S. President of the Geological Society, and Prof. of Mineralogy and Geology in the University of Oxford, &c. &c.

The author observes, that he has been induced to lay before the Society the accompanying representations of various portions of the skeleton of the fossil animal discovered at Stonesfield, in the hope that such persons as possess other parts of this extraordinary reptile, may also transmit to the Societ-

such further information as may lead to a more complete restoration of its osteology No two bones have yet been discovered in actual contact with one another, excepting a series of the vertebræ. From the analogies of the teeth they may be referred to the order of the *Saurians* or lizards. From the proportions of the largest specimen of a fossil thigh-bone, as compared with the ordinary standard of the Lacertæ, it has been inferred that the length of the animal exceeded forty feet, and its height seven. Prof. Buckland has, therefore, assigned to it the name of Megalosaurus. The various organic remains which are found associated with this gigantic lizard, form a very interesting and remarkable assemblage. After enumerating these, the author concludes with a description of the plates, and observations on the anatomical structure of such parts of the Megalosaurus as have hitherto been discovered.

TO THE EDITOR OF THE MONTHLY MEDICO-CHIRURGICAL REVIEW, &c.

Sir,—At a time when the interests of anatomy, in this country, are suffering, more from general prejudice than any other branch of science, it is really astonishing that those who superintend the dissection of the dead, should evince such a callous disregard for the feelings of the living. I shall at once allude to the transaction that has called forth this lenient vituperation; and sincerely do I trust that, if it be necessary to violate the tomb for anatomical purposes, a sense of common decency and delicacy will prevent in future such expositions as cannot fail to "harrow up the mind" of private individuals, and call down perpetual obloquy on your useful and learned profession, by stigmatizing it as barbarous and inhuman.

Taking up a newspaper the other day, how did my feelings revolt at reading the following paragraph.

"Disgraceful Transaction.—The body of a male child, apparently four months old, was yesterday found near May's-pond, Tooley-street. It was in a mutilated condition; the flesh was removed from several parts, so as to lay the arteries bare, the ends of which were stopped with wax, as if for purposes of anatomy. From its state, it is presumed that it had been thrown into the waste land where found, by some student, who had employed it for surgical experiments. This is the fifth body that has been found under similar circumstances during the last month. The information of the discovery was transmitted to Mr. Shelton, the coroner, who has appointed an inquest to be held on the body this afternoon."

Such transactions are most unequivocally of the basest stamp; and deserve to be put down by means equivalent to the evils that must arise, in a two-fold light, from such unprincipled conduct. Humanity is, and ever ought to be, inseparable from a well-educated surgeon—but what sense of honour, feeling, or humanity can that man possess, who, after having mutilated the once cherished object of a fond and mourning mother, for scientific purposes, could basely drop it down in some frequented spot, to be exposed to the view of every passenger, and held up *in terrorem* over the heads of the profession in general. Such conduct is at once brutal and wanton, and worthy of the severest censure: at a time too, more particularly, when the public voice is raised against that useful body of individuals the "resurrection men," and on whose heads the chastisement ultimately falls.

Although not of the profession, I beg leave, sir, in the hope of such abuses, in future, being obviated by the timely animadversion of the professors of anatomy themselves, who best know how to estimate the real interest of the profession, which can never militate with public sentiment, to subscribe myself

"A Friend to Science."

Borough, May 7th, 1824.

TO THE EDITOR OF THE MONTHLY MEDICO-CHIRURGICAL REVIEW.

Sir, Give me leave, through the medium of your popular journal, to enquire whether the late edict, if I may so express myself, posted up in the avenues to the different hospitals, &c.

in town, issued from the "Royal College of Surgeons" be unexceptionable, which sets forth, "that certificates of attendance at lectures, physiology, the theory and practice of surgery, and of the performance of dissections, be not received by the court (of examiners), except from the appointed professors of anatomy and universities of Dublin, Edinburgh, Glasgow, and Aberdeen; or from persons teaching in a school, acknowledged by the medical establishments of one of the recognised hospitals, or from persons being physicians or surgeons to any of those hospitals," &c.

Is, Sir, this to be a sweeping mandate, including the long-established private schools of anatomy, &c. for instance—Brooks's theatre, Blenheim-street—The theatre of the late Dr. and John Hunter, Windmill-street; Carpue's—Sir Herbert Mayo's—Grainger's, Maze-pond—in the metropolis; with other similar and equally meritorious establishments in the sister-kingdom—are these all to be swept away at one breath, "like the baseless fabric of a vision," at the nod of a few high-sounding names? No, such things can never be!—These can never pass away, "like a summer's cloud," to exist no more.—Or, do the "Royal College" mean to say, that the æra and force of their mandate shall be dated and be effective from the present time; and to affect such only as may henceforward erect similar schools—acknowledging, at the same time, the right and title of those which hitherto have added, and still continue to add, so many ornaments to the profession.

As I do not think the court of examiners have been sufficiently explicit on this head, to put the rising portion of the faculty in possession of their future intentions; it is but right that some early and satisfactory information should be obtained on the subject for their guidance; should nothing already have transpired to establish this *desideratum*, for, until the point in question be decided, I have no wish to obtrude myself, further than I now do, on the notice of the aforesaid court of examiners, many of whom I have the honor of knowing personally, until authorised to do so by their conduct; which, should it not be materially altered from that which is supposed to be their present motives, no one can consider these gentlemen either better or worse than as arrogant, presuming, and unqualified usurpers—a title I would by no means envy any man or set of men, who could attempt to snatch the well-earned laurel from the brow of honest fame.

In the mean time, I am, Sir,

"A Friend to Equity."

Lincoln's-Inn, April 4, 1824.

*** We are certainly, and ever shall be of opinion (*cum multis aliis*), that one of the most unexceptionable privileges of a corporate body is that of framing their own laws; and, whatever may be the opinion of others on this subject, we hold it as equitable for the College of Surgeons, as for any other body corporate, to alter as well as to introduce new clauses, from time to time, which to them shall seem meet, for the improvement and perfection of the profession, compatible with the evils and inconveniences, if any there be, against which they may have to contend.—Editors.

York Lent Assizes, March 31*st.*—*Action to recover the Amount of an Apothecary's Bill.*—Rœburn *v.* Burn.—Mr. Brougham stated to the jury, that this was an action brought to recover a very small sum of money, not more than 5 or 6*l.*, the amount of an apothecary's bill. The plaintiff, he observed, had been requested to attend the defendant's family, and had been some time employed in curing them of a disorder, the name of which he would not mention, but merely say, that it was of that description, that the sooner they got rid of it the better, both on their own accounts, and on account of those

who might have occasion to shake hands with them. Indeed, it was hard to say, whether they or their friends were most interested in its speedy removal *(a laugh)*; for that service the plaintiff had sent in a very moderate bill, not amounting to more than 20*s*. for each pair of hands so cured, *(a laugh.)* The defendant had refused payment, and it therefore became necessary for the plaintiff to resort to this action.

An assistant of the plaintiff proved the regular attendance of the plaintiff, and the delivery of the medicine, ointments, liniments, &c.

——Ræburn, brother of the plaintiff, was called to prove that the plaintiff was a regular surgeon. He stated, that the plaintiff had studied for three years in the university of Glasgow, and had been properly qualified to act as a surgeon. He had acted in that capacity from the time of his leaving Glasgow, till 1814. In 1814 he had gone to sea. He had gone as a surgeon of a vessel: the name of the vessel he did not recollect, but the captain's name was Clarke. — In examination, by Mr. Justice Bayley, witness could not answer, from his own knowledge, that plaintiff had acted as surgeon on-board the ship.

Mr. Justice Bayley suggested to Mr. Brougham, that this was not a case to go to the jury. There was no proof here that the plaintiff had acted as a surgeon on the 1st of August, 1815, the date of the Act requiring all surgeons and apothecaries to undergo examination before they become qualified to practise — Mr. Brougham submitted, that there was fair ground for inferring that such had been the case. The plaintiff had been regularly educated, —had practised up to the very day of his embarkation,—and had resumed his practice immediately upon his return. He therefore thought it a fair case to go to the jury.

Mr. Justice Bayley.—It has been already decided, that to have practised *before* the passing of the Act is not sufficient. It must be shown that the party was practising at the time when the Act passed. It is of the highest consequence that persons practising as surgeons and apothecaries, should have a regular education.—Mr. Brougham pressed the hardship which would be felt by the plaintiff, who would be deprived by this decision of the power of recovering any of his bills.

Mr. Justice Bayley.—Why does he not get examined at the College of Surgeons, or Apothecaries' Hall? I have no doubt upon the point: but, if you think this a misdirection, you can move the Court.

The plaintiff was accordingly nonsuited.

MELANGE.

On a tomb-stone in Bridlington churchyard, near Bristol, appears the following inscription:—"John Newman; 153 years old—1543." Old Parr died in 1654, aged 152. Newman outlived him by a year.

Father Menetrias says, that the song which Moses and his followers sang, after crossing the Red Sea, was the first musical composition: for it appeared 300 years before the birth of Linus and Orpheus, whom the Greeks made the father of poetry.

Scientific Minuteness. Cuvier, the celebrated French naturalist, has dissected an insect not an inch long, in which he reckons 494 muscles, connected with 494 pair of nerves, and forty thousand antennæ.

The new opera from St. Ronan's Well is (we believe) by Mr. John Dare, a Galway gentleman, and lately a geological student in Edinburgh.

Egyptian Hieroglyphics.—M. Champollion lately presented to the king of France his "Treatise on the Hieroglyphic System of the Ancient Egyptians," which is dedicated to his majesty.

Horace Vernet's Battle of Hanau, destined for the Orleans Gallery, is finished, and will add to the reputation of the artist.

Rossini.—Among the *on dit* which require confirmation, it is said that the English have laughed very heartily at some paragraphs in the Paris papers, which represent Rossini as living on a footing of perfect equality with King George the Fourth. It is

also said, that this celebrated composer is so *satisfied* with his visit to Great Britain, that he is extremely desirous of returning to France; and it is added, that he is sure of being appointed the director of our Italian Opera. That would be admirable, at the very moment that we are informed by our correspondents, that in the greater part of Italy the public taste has reverted to the old music of Cimarosa, Paesiello, Guglielmi, &c.—*Paris Journal.*

Egyptian Antiquities.—Mr. J. Burton, who is employed by the Pasha of Egypt in a geological examination of his territories, has made several important discoveries in the desert, to the eastward of the Nile, and along the shores of the Red Sea. In the Eastern Desert, and under the parallel of Syout, is a mountain called Gebel Dokham (the hill of smoke.) The summit of Gebel Dokham is traversed by roads and paths, which terminate in large quarries of antique red porphyry. Immense blocks, coarsely chiselled, lie about. Others, already squared, are upon props, marked and numbered. There are also an infinite number of sarcophagi, vases, and columns of a large size. At the side are some ruins of huts, and the remains of forges. At Belet-Kebye, a village in ruins, in the valley on the south side of the mountain, Mr. Burton found a circular well, twenty feet in diameter, and sixty feet deep. In the same village still stands a pretty little temple of the Ionic order; on the pediment of which is the following inscription: "For the safety and eternal triumph of our lord Cæsar, the august and absolute, and for those of all his house, this temple and its dependencies were dedicated to the Sun, to the great Serapis, and to the other Divinities, by Epaphroditus + + + of Cæsar, Governor of Egypt. Marcus Ulpius Chresinius, superintendant of the mines under Procoluanus." Mr. Burton has collected, at Fstiery, several inscriptions; among others this fragment—

Ann. XII. imp. Nervæ traiano
Cæsari Aug. Germanico
Dacico
P. I. R. Solpicium simium
Præf. æg.

The quarries of vert antique, between Ghene and Cosseir, have also supplied him with a great number of inscriptions; which a mixture of Greek and hieroglyphics must render very interesting to those learned persons who employ themselves in interpreting the hieroglyphic language of the Egyptians.

Secret German Societies.—It is rumoured that a religious sect, formed at Guebwiller (Higher Rhine) has been discovered to have clandestinely struck its roots very deeply among the manufacturers of that neighbourhood. Their books, and an extensive correspondence, have been seized by the proper authorities, and transmitted to the hands of justice.

Historical Account of the India-built Ship Swallow, lost in the Hooghly, 16th of June, 1823.—The Swallow was built in Bombay Dock-yard, by Manackjee Lowjee, the head-builder, uncle to the late Jamsetjee Bomanjee. She was laid down in 1777, and launched on April 2, 1778. She was first employed as a Company's packet, and made several trips to England; she was then taken into the Bombay marine, and after a short time returned to the packet service, in which she continued for many years, during which time many of the first Indian functionaries were passengers on-board her.

About the year 1800, the Swallow not being required as a packet, was sold to the Danes; fitted in London, and went to Copenhagen; whence she is supposed to have proceeded to the West-Indies; but, while there, was seized by a British man-of-war for a breach of a treaty, and condemned as a prize. She was cut out from her anchorage by a sloop-of-war, after a severe action; in which the British lost a number of her crew. She was then purchased into the King's service, became the Silly sloop-of-war, and was lately commanded by Capt. Sheriff; after serving some time in the West-Indies, she was, on her passage home, dismasted, and received other damage, in a violent gale of wind. On her return to England, she was sold out of the King's service, and bought by some merchants in London; made three voyages to this her parent port, as a free trader, and was lost in Bengal, on her fourth voyage outward.—*Bombay Gaz. 30th July,* 1823.

SPORTING INTELLIGENCE.

Spring and Langan.—These first-rate heroes of the fist both left London, on Wednesday last, for close-training.—Betting 2 to 1 on Spring.

Dr. Refce and Dr. Johnson.—These two heroes of the doughty quill and *vox præterea nihil*, are having a regular set-too of mutual recrimination. Spring-gardens has the best of it "*at long bowls*," but Piccadilly claims hitherto the advantage at "*in-fighting*," independent of being much longer winded than his antagonist. The odds are in favour of the latter.

"The Lancet."—Another white feather has just made its appearance in *this one's* tail.—Whether Mister W— be only spar-

ring for wind, or about to run away altogether, will shortly now be decided. "We have this week," says he, "withheld the Surgical Lectures, for the purpose of *presenting the profession* with a copy of the charter of the above college: (The Royal College of Surgeons). What a farce! "Withheld the Surgical Lectures to present the profession!!" No, No! Mr. W. you have withheld the Surgical Lectures, as you call them, that you may hold out a little longer yourself; for, in truth, you well know, the moment the present lectures close, and that will be in a few days, "your race is run;" your *cup* is then full; you will then fall, "like Lucifer, never to rise again;" with a long score of arrears *due to you.*

It is a well-known fact, that one bookseller, who, upon an average, has lately been in the habit of selling a dozen of the Lancet, weekly, to the pupils of St. Thomas's Hospital, had every one of them left, last week, on his hand; because the "Surgical Lectures were withheld, for the purpose of presenting (gulling) the profession" with a heap of nonsense. Mister Wakely must, certainly, think himself *somebody*; if he conceives the profession so easily and so capable of being *hoaxed* with a little tame rant and fustian, of the Bathos description. *Quere.* Is it because *Mister* W. is not a member of the "College of Surgeons," himself, that he is so fond of venting his spleen against those who are? Then may he exclaim,

"My heart laments that virtue cannot
live out of the teeth of emulation."

We speak only from supposition, although we have no reason otherwise than to suppose that Mr. Wakely is a "*fellow*," of some kind; notwithstanding his name is not to be met with in the last published College list.

New Publications.

Just published.—CRITICAL PUBLICATIONS in PHILOLOGY and GEOGRAPHY, 8vo. 8s.

HISTORY OF MEXICO, from the Spanish Conquest to the present Æra, &c. By NICHOLAS MILL, Esq. 8vo. 10s.

The NEW DOMESTIC MEDICAL MONITOR; being a Practical Guide to the Treatment of Diseases generally; on a simplified, condensed, and familiar plan; containing Opinions of the most eminent Practitioners—with a variety of popular Prescriptions, translated into English; for the Use of Clergymen, Superintendants of Seminaries, Heads of Families, Captains of Ships, Travellers, &c. &c.; with a variety of other useful information. By J. S. FORSYTH, Author of the "Mother's Physical and Medical Pocket-Book." 12mo.

MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE (old series). 2 vols. 8vo.—containing much diversity of Practical Surgical and Medical Information, &c. for the last 18 months, &c.

The NEW LONDON DISPENSATORY: containing a Translation of the Pharmacopœia Londinensis of 1824. With a Medical, Natural, and Pharmaceutical History of the Articles in the Materia Medica, &c. By THOMAS COX, M. D., Member of the Royal Medical Society, Edinburgh, &c.

BIRTH.—The lady of Dr. Holland, of Lower Brook-street, of a daughter,

MARRIED.—April 13th, at St. Alphage, London-Wall, Isaac Piddock, Esq. M. D. of Great Russell-street, Bloomsbury, to Charlotte, eldest daughter of Mr. Stevens, attorney-at-law, Sion-College-gardens.

May 6th. at St. Mary, Lambeth, Dr. Thomas Rees, of Upper Kennington-green, to Elizabeth, eldest daughter of John Jacks, Esq. of the same place.

Obituary.

On Sunday, the 2d inst. at his house in Russell-place, Archibald Cullen, Esq of the Middle Temple, one of his Majesty's Council, and the youngest son of the celebrated Dr. Cullen.

At Edinburgh, on the 2d ult. Andrew Fyfe, Esq. F. R. C. Surgeon, Assistant to the late Dr. Munro, and author of the System and Compendium of Anatomy.

On the 15th. ult. Sutherland Meek, Esq. M. D. late Member of the Medical Board, at the Presidency, Bombay.

On the 16th ult. at the advanced age of 95, Mary, widow of the late Mr. Richard Whitehead, farmer of Trowel, Nottinghamshire. She was the mother of 12 children; namely, seven sons and five daughters; and lived to see their issue three generations, consisting of 49 grand-children, 105 great grand-children, and 22 great great grand-children. Total of her progeny, 188.

On the 17th ult. at Totness, Devonshire, deeply regretted by her family and friends, aged 31, Rebecca, daughter of Mr. Wimberley, Surgeon of that place, after a long and painful illness, which she bore with exemplary fortitude and resignation.

On Wednesday, March 14th, at Earle's-colne Priory, Essex, in the 90th year of his age, the Rev. Thomas Carwardine, A. M. Prebendary of St. Paul's, and Vicar of Earle's-colne.

THE MONTHLY

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"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

ANALYSIS OF MEDICAL JOURNALS, &c.

London Medical and Physical Journal, (June.)

Art. I.—*Some Observations on the Pathology of the Spleen.* By John Vetch, M. D. F. R. S. E. &c.

Art. II.—*Illustrations of the Efficacy of Compression and Percussion in the Cure of Rheumatism and Sprains; Scrophulous Affections of the Joints and Spine; Chronic Pains arising from a Scrophulous Taint in the Constitution; Lameness, and Loss of Power, in the Hands, from Gout; Paralytic Debility of the Extremities; General Derangement of the Nervous System; and in promoting Digestion, with all the Secretions and Excretions.* By William Balfour, M. D. Edin.

Art. III.—*Report of the Asylum for Military Lunatics, at Fort Clarence, from its Establishment in May* 1819, *to May* 1823. By S. A. Schetky, Surgeon to the Forces, (in charge of the Asylum.)

After some interesting preliminary matter, relative to the origin, object, and organization of the institution—arrangement and mode of classification of the patients, who are admitted into the Asylum by authority of the secretary, or the commander-in-chief, or director-general of the medical department, Mr. Schetky remarks, that as the disease has always existed some time before the admission of the patient, the cause is often obscure; and that, in consequence of its never having been seen in operation, and its complication with hereditary, or other predisposing causes, the inquiry is necessarily obscure.

The different causes of derangement, assigned in such of the cases as have received any illustration of this kind, are enumerated as follow:—

Physical Causes.		*Moral Causes.*		*Hereditary.*
Fever	6	Religion and Fanaticism	6	12
Wound on Head	5	Love	2	
Malformation of Head	2	Family Misfortunes	3	
Coup de Soleil	1	Fright (in Females)	2	
Drinking	3	Disappointment	1	
Apoplexy	1	Violent Passion (Rage)	1	
Epilepsy	5	Remorse	1	

Dissection, observes Mr. S., of the fatal cases, has not thrown any satisfactory light on the pathology of mania. In many instances the most minute examination could detect no organic lesion; in others, marks of vascular congestion were found, and plethora of the cerebral vessels. Effusions of serum, in morbid quantity, were found in some cases of idiotism, where such appearances might have been anticipated. Roughness and

absorption of the posterior clinoid processes were frequently, but not universally, found.

Mr. S. then goes on to state, that

"The mode of treatment adopted in Fort Clarence is not peculiar to the place; neither is the disappointment, which has so often followed every curative effort. The distribution of these into physical and moral means, is implied by the nature of the respective causes. That the powers of either plan of treatment are often considerable in recent cases, we have had opportunities of verifying.

"The physical cure, where maniacal excitement is present, is sought, 1st, by diminishing the afflux of blood to the head, either by general or local abstraction of blood; or, 2d, by the superinduction of some other derivative evacuation, as by purging or vomiting: the emetic preferred is the sulphate of copper; the cathartics vary according to occasional circumstances. The oil of turpentine, in doses of half-an-ounce to six drachms, has, in several cases, appeared decidedly serviceable; elaterium, gamboge, oil of croton, &c. &c. 3d. By setting up some vascular action or secretion, derivative of the morbid excitement, from its pernicious concentration upon the sensorial organs, as by blistering, setons, nettles externally applied, mercurial excitement carried the length of gentle salivation, —warm bath; or, 4th, by suspending the nervous sensibility, and inducing quiescence of all the functions, by narcotics and sedatives,—cold. The narcotics are stramonium, prussic acid, and opium. Cold is applied by affusion from a great height on the head, while the body is immersed in the warm bath. In this last way, the circular swing, although in its first effect decidedly an emetic, was, by its early introducers, believed to act. During the collapse and distressing sickness and languor produced by this dreaded instrument, penitence and strenuous promises of amendment have sometimes been proffered; they were forgotten as soon as the sickness went off.

"What is called the moral treatment comprehends discipline, and every thing connected with mental training. The exercise and amusements of the patients are, by their effects in changing the trains of thought, and weaning the patient from his reveries, reducible to the same head. These resources are with us very limited. To find the means of exertion, varied according to the tastes and education of individuals, or even of groups of individuals, (as by the establishment of any easily-learnt trade,) would require an appropriation of capital much beyond the funds accruing from the stoppages of the patients. The only available means seemed to be the conversion of the grounds of the Fort into an extensive kitchen-garden, to be cultivated by the patients, by which means economy and healthful labour, it was hoped, might be jointly ensured. On trial, however, the soil was found to be so very thin and barren, as to render all attempts at extensive culture chimerical, without creating a new mould by manure; consequently, by much outlay. A stripe along the better part is, however, at present under the spade of the maniacs, and some good must come of the attempt.

"The soldiers of Britain cultivate few accomplishments, by which to embellish their retirement. While the less complete subdivision and appropriation of labour in foreign countries has left to their peasantry, and consequently to their soldiers, a comparatively large share of versatile ingenuity and variety of resources, (as we have seen in the neat productions of the French prisoners,) the concentration of the powers of the Englishman to the few automatic, unintelligent motions, by which, as a small part of an immense machine, he co-operates to the production of a great effect, increases his peculiar utility, but impairs his general powers of invention. Hence none of those neat models, no dice, no chess-men, no cribbage-boxes, nor straw hats, issue from the convalescents of English hospitals.

"One patient alone in Fort Clarence, however, is a votary of the fine arts, and his paintings are exceedingly original, quaint, and ingenious. His pencil, a tuft of the down of the thistle, tied on a small stick plucked out of the birch-brooms, (which he seems to prefer to the pencils of the shops, which have been supplied him,) is always dedicated to the higher walks of the art,—battle pieces, allegories, processions, and ideal portraits of persons, living characters, whom he has never seen. It is interesting to contemplate the products of mere genius, unassisted by the precepts of the art. With him must be associated the clarionet-player, who once belonged to a military band, and an occasional amateur taylor: upon the rest the Muses have never smiled.

"The moral remedies for reverie are mental industry, reading, and difficult study, —above all, the practice of the world, where it can be had with safety. In Fort Clarence the studies of this class are carefully encouraged, when any portion of capacity remains, or has ever been cultivated. Lieutenant H———— and Hospital-mate S———— are allured to study by placing classical authors in their way. They are both promenaded into the town every day,

under the wardship of the keeper. Ensign O——— was made to work an arithmetical account, connected with the hospital, every day.

No delusive coaxing or flattery, continues Mr. S., of the absurdities of the patients is practised, except for the occasional purpose of ascertaining the particular bent or type of their maladies. Such of them as are, in any degree, amenable to the laws of common reason, are treated very much in the same way as if they were sane people: they are made to feel the yoke of necessity. Reasoning is seldom attempted, except where a ray of sense appears to have broke in upon their fatuity; nor any particular delicate mental management, by setting up opposite prejudices: the period when, if ever, the latter mode of treatment could succeed, is past long before the admission of the patients. Besides, except in the mere case of reverie, there is depravity of judgment; the patient sees through a false medium. To correct his wrong impression, were it possible, could only be done at the expence of setting up another in its stead. All that could be hoped from subtlety of psychological treatment, is here sought from the quiet of the place, from the confinement, the regular hours, exercise, the cold severity of deportment of the attendants towards the froward, the friendship and protection extended towards the timid and amiable. The sallies of the ferocious are checked by mere coercion, if that type is attended with complete prostration of the perceptive and discriminative powers: if these remain in part, if the case is one of mere ardour and disposition to violence and extravagance, from the sudden rising of some internal painful feeling, moral or physical, punishment is awarded, in conjunction with such physical remedies as may appear indicated; and correction is often attended with very striking temporary advantage. It is inflicted by means of the circular swing, or by solitary confinement. The former of these means is seldom used for any other purpose than punishment, as I imagine that a remedial power, which, by the mode of its application, implies an harsh and violent infliction, must labour under the drawback of appearing to the patient a gratuitous act of oppression and cruelty.

Such is the moral treatment, if such it can be called, of insanity, as practised in Fort Clarence.

On the proportion of cures I have no other observation to make, except that I hope it will be found to be not inferior to the number of cures achieved in other establishments; regard being had to the comparative length of time during which the disease may have lasted previous to admission.

"The deaths have all proceeded from corporeal ailment, unconnected with the insane malady, or, at least, only remotely and indirectly so connected. They have proceeded chiefly from tubercular consumption, to which melancholic and imbecile patients are peculiarly liable. Some, from vociferation proving an exciting cause of tubercular disease; some, from occasional exposure of the body (neck and breast,) to cold; but most from that torpor and debility which is the attendant upon mental absorption. In that languid, lethargic state, the latent seeds of disease are speedily developed; temperament is rendered morbid, and predisposition is rendered active. Consumption is also occasionally produced by gastric and hepatic derangement, in the patients who arrive from hot climates. Some have died of paralysis, and one from phrenitis acuta."

Such is the condition of the patients in Fort Clarence; an institution which must be interesting to those whose philanthropy is able to subdue the natural aversion excited by the dreary, disgusting spectacle of man in his most degraded state. One grand desideratum is apparent in every part, the want of room for

classification: it will speedily be wanting for comfort also, unless some addition is made by building.

Art. IV.—*A Case of the reversed Position of the Thoracic and Abdominal Viscera.* By Douglas Fox, Member of the Royal College of Surgeons, London, *(with an Engraving.)* Derby, May 10, 1824.

The case here described was a fœtus, expelled about the fifth month of pregnancy, in consequence of the mother having inflammation of the bowels.

"In the thorax, the heart was seen placed obliquely, with the basis turned upwards and backwards towards the left side, and the apex turned downwards and forwards towards the right, being situated exactly opposite to what is usual. The transverse arch of the aorta bent obliquely backwards, but contrary to what might have been expected, towards the left side; where, becoming the descending portion, it pursued its course in the common direction down the left side of the spinal column. The three great arterial branches, which are given off from the curvature of the aorta, were, first, the arteria innominata, which divided into the left carotid and left subclavian; the second, the right carotid; and the third, the right subclavian.

"The lung on the right side was divided into two lobes, that on the left into three.

"In the abdomen, the liver was situated almost entirely in the left hypochondrium, there being but a small portion extending to the right.

"The great extremity of the stomach was in the right hypochondrium; the organ then crossed the epigastric region into the left, from whence the duodenum arose, which united with the jejunum near the right kidney.

"The cœcum, with the appendix vermiformis, was placed in the left iliac region. The direction of the colon was the reverse of what is common, and near the termination it formed the sigmoid flexure, in the right iliac fossa.

"The pancreas had the great extremity towards the left side; the viscus terminated near the spleen, which was placed backwards in the right hypochondrium.

"The external appearance of the fœtus was extremely good, there being no malformation or deficiency whatever; nor was there any other irregularity in the shape or structure of the viscera themselves than what has been stated.

"The more minute parts were not examined, as it was wished that the subject should be preserved entire, to be presented to the museum at St. Bartholomew's Hospital."

Art. V.—*Extract from a Report of Medical Cases at Fort Pitt, illustrative of the large Doses of Digitalis, which may occasionally be given with advantage.* By John Davy, M. D. F. R. S.

"In a case which is still in the hospital, but convalescent, a very remarkable recovery has taken place. The patient contracted the disease (dropsy) in India, where it followed an attack of ague and dysentery. During the last twelve months he has been tapped nine times. Now he is in pretty good health; his abdomen is reduced nearly to its natural size, and is without fluctuation. This favourable change, I think, may be justly attributed to the medicine he has used, viz. digitalis in a bitter infusion, with some subcarbonate of soda, and a minute quantity of blue-pill. I commenced with five grains of the powder of the leaf, and gradually increased it to *one hundred and fifteen grains* daily. It is worthy of remark, that this medicine operated and produced the good effect almost insensibly. When at its maximum dose, the pulse was rather quicker than natural; it never affected the head or stomach, and never increased the quantity of urine. It may be supposed, perhaps, that the preparation was not good: this I cannot admit, for in some cases of pulmonic disease, in which it was given, it produced the common effects of the drug, in the usual dose.

The case of anasarca, which was very severe, was completely cured

by pulv. digitalis, gradually increased to *one hundred grains* daily. It is remarkable that, whilst the patient was using this medicine, his pulse was not apparently affected; but, on the day following that on which he discontinued it, the pulse suddenly fell from between seventy and eighty, (which it usually was,) to forty-six, and became irregular: next day it recovered its natural beat.

The case of ascites was attended with cough, pain of the right side of the chest and right hypochondrium, and was of three years' duration. It was cured by an alterative course of blue-pill, conium, and rhubarb, followed by pulv. digitalis, gradually increased to *one drachm* daily, exhibited in bitter infusion.

LONDON MEDICAL REPOSITORY.

Art. I.—*On Curative Medicine.* By William Shearman, M.D., &c. &c. Northampton-square, London.

Art. II —*Case of Purpura Hæmorrhagica successfully treated with the Oleum Terebinthinæ.* By Whitlock Nicholl, M.D.

Art. III.—*On the Effect of Mercury on the living Body.* By Henry Robertson, M. D.

Art. IV.—*Case of Lacerated Perinæum.* By James Morss Churchill, Esq. Member of the Royal College of Surgeons.

Art V. — *Observations on Spinal Consumptions, and its Distinction from Phthisis Pulmonalis, and Tabes Mesenterica.* By William Gaitskell, Senior, Esq. Member of the Royal College of Surgeons.

As this case is of more than ordinary interest, with permission, we shall lay it before our readers without comment or observation.

"My attention has been frequently directed to a remote cause of consumption which has been very generally overlooked, and which, if attended to, the consequent disease may be arrested, and the life of the individual preserved: this cause is spinal distortion—the result of spinal consumption.

Both sexes have fallen victims to this insidious and lingering malady; but, according to my observation, in the proportion of nine females to one male; and, of the former, more have suffered from it between the ages of fourteen and twenty than at any other period of life.

History of the Disease.—The foundation of this disease is often laid at the early age of four or five years, and first displays itself in a disposition of the infant to sit or stand with the head inclined forward, but so slightly, as barely to be perceived by the parents. In a few months this inclination becomes noticeable, and the child complains of a little pain in the back, is sick at the stomach, and rather costive, while the muscular flesh wastes. This is attributed to worms, and medical or empirical advice sought for;—if the former be obtained, a few doses of calomel are administered, followed by cooling purgatives and regulated diet. These, with the aid of a recumbent position (which the little patient instinctively covets), afford some temporary benefit.

In this manner the disease will sometimes go on for years, till the stature becomes extended, when the stooping posture grows conspicuous. The relations and friends perceive it, and rebuke their child for indolence, as well as chide it for the inelegance of its shape.

To remedy this, all sorts of mechanical contrivances are projected; such as backboards with or without collars, inclined planes, and a thousand other ingenious devices, well

suited to inanimate bodies, but not to living ones.

These mechanical means, aided by generous diet, exercise in the open air, rural amusements, and cold bathing, sometimes interrupt the progress of disease, by improving the muscular power, which, balancing the spinal column on its basis, the health becomes ultimately restored. On the contrary, however, it frequently happens that the muscular power suddenly fails, the bowels become obstinately constipated, the animal heat sensibly diminished, the appetite impaired, cough comes on without expectoration, and the patient dies of atrophy.

Diagnosis.—This species of consumption, the spinal, differs from the pulmonary in many very essential particulars.

In phthisis pulmonalis there are rigors, succeeded by paroxysms of heat and colliquative sweats, with a remarkably quick and contracted pulse; but, in spinal consumption, there is gradual loss of strength, particularly in the lower extremities; want of the febrile paroxysms; the skin is cool and never hot, except in the last stage, when the lungs become involved in the disease; and the bowels are obstinately costive; there is also slight cough, without expectoration; whereas, in phthisis, there is teazing cough, with copious muco-purulent expectoration.

It is equally distinguishable from tabes mesenterica; because, in this disease, there is great abdominal fullness, mucous and watery stools, with hectic fever and emaciation; whilst, in spinal consumption, instead of abdominal fulness, the bowels are flat and wasted, so much so, that the pulsations of the aorta may be felt through the abdominal parietes.

Origin of the Disorder.—It appears to me, from much personal observation and inquiry, that the enthusiasm of the present age to cultivate the higher functions of the nervous system at a too early period, and before they are sufficiently developed and adapted to receive and retain the numerous impressions to which they are subjected, leads to serious mischief—Nature is deprived of the power of unfolding, in her own way, the animal structure. The effect of pressing knowledge too early in life upon a weak frame, is to cultivate the mind at the expense of health, and to sacrifice the physical developement and energy of the constitution to mental precocity and premature exertion of the faculties, which either never reach their full activity, or wither the earlier for their forced growth. Such unnatural mental excitation also frequently gives rise to cerebral derangements, which, if the infant survives, often terminates in idiotism.

The physical indolence thus induced, checking the infantile inclination to perpetual action, so necessary to bodily vigour, aided by warm rooms, impure air, and improper diet, favour the tendency in the trunk to bend forwards.

This is farther encouraged by allowing the child to read in a low chair, with the book resting on the lap—a practice which, by pressing the bodies of the vertebra closer on each other prevents their developement; at the same time, the spinal processes being separated, and the muscles of the back kept constantly on the stretch, their power becomes lessened, and rendered incapable of supporting the spinal column on its proper centre of gravity. By these means the spinal nerves, which supply energy to the thoracic and abdominal viscera, become slightly compressed, and, consequently, their

proper functions slowly but perceptibly destroyed.

The next error is that of parents sending young females too early in life to boarding-schools, to relieve themselves of the trouble of superintending them in their more tender age, where they are deprived of the most essential requisites of health —good diet, pure air, plenty of exercise, and an unshackled mind; instead of which, they have imposed upon them great restraints, sedentary habits, impure atmosphere, scanty diet; and their minds are crammed with ill-assorted knowledge; and with much that is neither suited to their years nor to their natural dispositions. This is the reason why so large a portion of the female sex fall victims to this disease.

Boys, though injured by the same parental indiscretion, more frequently drop into this disorder, when they have become debilitated by previous illness, and when the position of the trunk has not been attended to. Also those who are of a scrofulous habit, which implies a weak and irritable frame, with great capacity and avidity for knowledge, when they are sent to school to be half starved, and principally fed upon books, frequently lapse into the species of ailment under consideration.

To these sources I have traced several cases of this species of hectic, which, commencing with spinal distortion, has terminated in structural derangement of the thoracic viscera.

Treatment.—It has been a rule with me for many years, when consulted by patients who have lost much flesh by absorption and imperfect reparation of the different organs, to examine the spine; and, if I find a greater projection than ordinary of the spinal processes, or particular tenderness on pressure with the fingers, or any fixed pains in supporting the body perpendicular to its base, to suspect a slow inflammation of the inter-vertebral substance, which, if not interrupted, will lead to the most alarming evils, such as suppuration, ulceration of the bones, paralysis of the lower extremities, gradual marasmus, and death.

To stop the progress of this insidious and certainly destructive malady, I have usually recommended the application of four leeches on each side the spine close to the part affected, and when the leeches have fallen off, warm bread and water poultices, till the bleeding ceases. These I have repeated, in the adult subject, every fourth day for a fortnight, till the pain is relieved; and as a deposition of lymph is a natural consequence of every chronic inflammatory action, I have blistered the part two or three times in succession, according to symptoms. These means I have found to be aided by adopting (under certain limitations) the plan of that very excellent surgeon, the late Mr. Baynton, of placing the patient on a horse-hair mattress, without a pillow.

With respect to the constitutional treatment, after inquiring minutely into the secretions and excretions, I have occasionally recommended the warm bath, at 96°, for about twenty minutes, and repeated it about twice a week, in order to favour cutaneous secretion, and to fill the capillaries.

If the stomach is affected with nausea or throwing up of ingesta, I have then administered an ipecacuan emetic, which not only removes morbid gastric secretions, but balances the circulation, and aids the biliary secretion. As the intestines are partially paralysed and difficult to be moved, I have prescribed a cathartic pill at bed-time, and purged it off the next morning with a suit-

able dose of infusion of senna with sulphate of magnesia. After this, it is important to obtain well-regulated hepatic secretions. I have found this to be best effected by giving five grains of hydrargyrus c. creta with an equal quantity of rhubarb, every night, in a little honey; the action of this medicine is essentially aided by an injection, administered every, or every other night, composed of half-a-pint of warm water, grit gruel, linseed tea, or fat mutton broth. It is surprising how much this contributes to promote the proper peristaltic motion of the intestines.

As soon as I have found the smallest action of the mercury on the gums, I have desisted from its use, and, when the stomach and bowels are properly regulated, prescribed from ten to thirty grains of the carbonate of iron three times a day, to restore the tone of the system.

Under this treatment I have generally observed, in a month or two, great improvement in health; then, instead of pursuing Mr. Baynton's plan of lying without intermission, I have changed the position of the trunk, by allowing the patient to sit up two or three hours in the day.

As soon as the returning strength permits, I have advised the patient to walk as upright as possible; and to assist this, I adopted the judicious plan of the late Mr. Wilson, who recommended the patient to carry a weight on the top of the head, balanced by the hands; which, by extending the spine, brings many small muscles into play, and thus restores their lost energy.

This weight, at first, should be only one pound, and by degrees increased to ten. The time of walking ought not to be more, at first, than ten minutes, three times a-day, increasing the exertion according to the augmentation of physical power.

The effort of supporting a weight upon the head by the aid of the hands, not only relieves by straightening the spinal column, but it has many other important advantages—it promotes the free passage of blood through the liver, spleen, pancreas, and larger abdominal blood-vessels.

When the trunk is raised and inclined a little backward, all those appendages to the digestive canal are greatly assisted in performing their respective offices; while the inferior extremity of the sternum, being farther removed from the spine, gives free space for respiration.

With respect to diet, it must be regulated by the state of the pulse and constitutional symptoms. When a febrile state has existed, such as quick pulse, heated skin, furred tongue, and head-ache, I have confined my patients to barley-water, toast and water, orgeat, thin arrow-root, and roasted apples. When these symptoms have subsided, I have allowed them fish, animal jellies, eggs, and blanc-mange, and gradually adapted the quantity and quality of the food to the powers of the stomach.*

Art. VI.—*A Case of very severe Injury of the Brain, in which Life was apparently saved by long continued and extensive Depletion.* By William Shoveller, Esq. Surgeon of His Majesty's Ship Jupiter.

[Communicated *(Lent)* by Dr. James Johnson.]

"The quantity of blood taken in this case from the 5th of April to the 13th, including twelve ounces lost in making an incision over the tumour, and two bleedings, one of eight and the other of twelve ounces,

* Mr. Gaitskell has favoured us with several cases, wherein the practice which he has laid down was strictly observed, and proved successful. These are interesting; but as he has very clearly developed his views in the body of the paper, any further illustration of them by the publication of the cases is rendered unnecessary.

from the temporal artery, amounted, in all, within eight days, to 136 ounces. The first bleeding was ℥ xxx., 2d. ℥ xxiv., the others, from the arm, ℥ xxiv—℥ xx. &c.

Art. VII.—*Contributions to Pathology*, No. V.—*Case of Tumour in the Cerebellum.* By Joseph Ward, Esq. Member of the Royal College of Surgeons, and Apothecary to the London Hospital.

Art. VIII.—*Cases in Medical Jurisprudence.* By John Toone, Esq. Salisbury, Member of the Royal College of Surgeons.

1.—*Case of sudden Parturition.* In No. 3. we have given some similar cases, from the same quarter; still, although the present case of Mr. Toone's is interesting, we shall pass over it and come to the

Influence of Maternal Imagination on the Fœtus.—"I beg," says the author, "to be permitted to offer a few remarks, upon the much-disputed point of the influence of the imagination in pregnant women, and the effect of external impressions upon the fœtus in utero.

"The extent to which many women, for interested purposes, and others from ignorance, are disposed to carry the idea of this susceptibility, is unwarrantable, and often truly mischievous; yet, on the other hand, it can scarcely be denied, that during pregnancy the imagination does, in some cases, seem to exercise a very extraordinary influence upon the formation of the child, and that this is occasionally very materially affected by external impressions. Indeed, from circumstances which have occurred in my own practice, so strongly is this opinion entertained by me, that whenever the mother, during the period of gestation, has related any remarkable transaction which has been forcibly impressed upon her mind, or any accident of an extraordinary nature which has befallen her, I have seldom been mistaken in my expectation of some defect or malformation of the child. The following cases are selected, to illustrate the foundation of this opinion:—

"Mrs. D., of B., when far advanced in her first pregnancy, was accidentally passing at the moment when a child fell under a waggon, the wheels of which went over it, fracturing both arms, both legs, and so severely injuring the trunk, as to cause its almost instant death. The little sufferer was taken up in her presence, with its mutilated limbs dangling uselessly from it. She was most violently affected by the accident; and, after some time, was delivered of a daughter, whose limbs were at the moment of birth, and have subsequently (after a lapse of twenty-five years) continued to be in a state of laxity and perfect uselessness, precisely similar in appearance to that of the injured child.

"Mrs. B., of Fisherton, was alarmed, during her pregnancy, by going to answer a knock at her door, from one of the Italian itinerant showmen, who thrust the hind part of a racoon nearly in her face. On delivery, her child had extensive spina bifida, with peculiarly emaciated buttocks and lower extremities.

"Mrs. N., of Catherine-street, was standing at her door during the passing of an election cavalcade, when a girl of the town, with a most terrific harelip, thrust her face nearly into contact with that of this lady, who fainted from the shock. Some months afterwards, she was delivered of a remarkably fine and well-formed child, with the exception of a deep harelip.

"Mrs. C., of Endless-street, returning home one evening, in about the seventh month of her pregnancy, missed the bridge before her door, and fell into the water: the inconvenience which she felt from the fall was slight. On delivery, the ossification of the parietes of the cranium was so imperfect, that a congeries of small detached portions, like lentils, was alone perceptible. The head and neck of the left thigh-bone was also separated from its shaft, in the centre of which another fracture was discovered. It is worthy of remark, that the father of this child was born in precisely the same state, as to the thigh, which has been subsequently frequently fractured anew."

The first case, Mr. T. observes, is authenticated by an intimate acquaintance with the family in which it occurred, and the rest came immediately under his own notice, in the whole of their progress."

Art. IX. — *Abstract of Cases wherein the Saturated Tincture and Extract of Belladonna were administered.* By Powell Charles Blackett, Esq., Member of the Royal College of Surgeons, and Surgeon-Extraordinary to his Royal Highness the Duke of Clarence.

The following is a brief abstract of a number of cases of various complaints, in which Mr. Blackett has exhibited the atropa belladonna in private practice for several years past. If the experiments, adds Mr. B., the result of which I now proceed to give, do not prove so conclusive as to lead to the general use of this medicine, they may, nevertheless, have the advantage of shewing in what diseases it has been administered, either with or without benefit; this being the first step towards obtaining a knowledge of its medicinal powers, on which we can rely with confidence. Although the belladonna may not prove a very important remedy in many diseases, yet certainly it will be a great point gained to know to what lengths it may be administered with safety; and to point out the manner in which it affects the patient, even when it fails of producing a beneficial effect on the disease. Thus, even from its failure in some disorders, we may be induced to draw inferences calculated to lead to its beneficial employment in other diseases, and under circumstances in which it had been neither exhibited nor thought capable of rendering any service.

Case 1.—A marked case of hysteria libidinosa. The following is the formula.

℞ Tinct. Bellad. Sat. ℥ij.
Mist. Camph. ʒ vss.
Sp. æther. comp, ʒ ij.
Ft. Mist. cap. 4tam partem 6tis horis.

Case 2.—Paroxysms of hysteria (from retention of the menses.)

℞ Tinct. Satur. Bell, ℥j.
Mist. Camph. ʒ vj
Ft. Mist. cujus cap. cochl. iij. 4tis horis.

There are twenty-two cases given by Mr. Blackett. There are three more of hysteria, where the belladonna produced the most baneful effects. In one of these the disease was cured by large doses of the carbonate of iron. ("It was a decided case of hysteria à leucorrhæa.")

In the other two, similar effects (cold shiverings and perspirations) were produced. "We must, therefore," adds Mr. P. "infer, that when this disease (hysteria) is brought on by debilitating causes, the belladonna is extremely noxious."

Case 7.—Pertussis, with considerable determination to the head, a fourth part of a drop of Belladonna, night and morning, according to the following formula.

℞ Tinct. Bellad. ℥j.
Pulv. Tragac. comp. ʒ ss.
Aq. Menth. Virid. ʒ iv. Fiat. Mist. cujus cap. 4tam partem Nocte Maneque.

Cases, 8. 9. 10. 11. 12., Pertussis. Dilatation of the pupils, cold shiverings and perspirations occurred here in one or two instances, and in one case the patient did not recover his sight for five days—diseases all relieved, nevertheless, by the belladonna.

Case 14.—*Tumor Mammæ.*

℞ Cerat Saponis, ʒ j.
Extr. Bellad, ʒ ss.
M. Ft. ung.

And to take the carbonate of iron in pills.

℞ Ferri. Carb. ʒ j.
Mucil. G. Acaciæ, *q. s.* ut fiat.
Pilul. xij quarum cap j 4ta quaque hora.

The patient continued this plan for seven weeks, at the end of which time the tumour totally disappeared. This is the seventh case of tumour, says Mr. B., in which I have found it successful.

Case 15. —*Spasmodic Stricture of the Rectum.*

℞ Ung. ceræ, ʒ ss.
Extr. Bellad. ℈j. M. F. Ung.

Two hours after the application of which, she had three motions. After the fourth day, the belladonna was increased to half-a-drachm; one

motion was afterwards procured. On the next day there was no evacuation. The ointment was repeated, but no motion obtained; and continued the following day, but without benefit. In this case, it appears, the muscles and contiguous parts were completely paralyzed by the belladonna. An enema was administered, but returned. The fæces were scooped out, and an injection of salt and water used every four hours with an opiate at bed-time. This plan was continued for two days, when the parts recovered; the patient has continued well ever since. Mr. B. takes blame to himself for having pushed the application so far as he did in this case, as it might have been followed by more serious consequences.

This case proves, that the belladonna is not a medicine to be trifled with, even as an external application.

Case 16.—*Acute Rheumatism.*—Bleeding, purging, and sudorifics, also a vapour bath, upon a domestic contrivance,* was employed twice a-day without benefit, although it produced the most copious perspiration. In the next application of the vapour that was resorted to, an ounce of the extract of belladonna was dissolved in the boiling water. "She felt almost instant relief from this mode of administering the belladonna, which relief continued until the morning." The pains having returned, the bath was repeated—by other repetitions, her pains left her, and she gradually recovered.

"If, in this case, I had been fortunate enough to have had captain Jekyll's vapour bath, with the useful appendages, I have not the least doubt that even fewer applications of vapour, impregnated with the belladonna, than the few which were employed, would have been sufficient, and that her pupils would not have been dilated in the manner in which they were. Then dilatation, in her case, was owing to the steam escaping through the blankets; but it did not continue longer than two or three hours.

Cases 17. and 18.—*Sprain.*—Belladonna, with soap cerate, was here attended with the most decided benefit.

Case 19.—*Ulcer.*—This was a sphacelated ulcer, produced by a chilblain; which is extremely painful to the touch. Mr. Blackett applied the following dressing:—

℞ Ext. Belladonna, ʒ ij.
Cerat. Saponis, ʒ vj. M.
Ft. Ung. Nocte Maneque applicandum.

"An hour after the first application the sore became easy. After the sixth or seventh dressing, the parts put on a healthy appearance; and in the course of ten days the ulcer was perfectly healed.

In cases of stings of wasps, bees, gnats, &c. Mr. B. states, that he has used the following lotion with success; one application, in general, being quite sufficient to remove the pain and inflammation.

℞ Aquæ Rosæ, ʒ iv.
Liquoris Ammoniæ Acet. ʒ ij.
Tinct. Bellad. ʒ j. M. Ft. Lotio.

Case 20.—"M. C., a woman of seven-and-twenty, residing in Bell-street, Paddington, having been some time in labour, and the os uteri being dilated only to about the size of half-a-crown, and very rigid—a state which, in general, was met with in all her confinements. I applied half a drachm of the extract of belladonna to the os uteri, and waited a quarter of an hour for a pain, which was ten minutes longer in the interval than before the introduction of the narcotic. To my great surprise, when I examined, I found the mouth of the womb flabby, and could move my finger within it, as if it were an empty bag. I tried to bring an action, both by giving stimulants internally, and rubbing externally the abdomen, and irritating the os uteri. The womb did not recover from its paralyzed state for six hours after the application, when the os uteri returned to its former state of dilatation, (which was the size of half-a-crown). The pains then came on rapidly, and she was delivered in the course of twenty minutes. After this lesson, I will

* The patient was placed in a chair, covered with a blanket, so as to keep the hot steam, from a pail of boiling water, (which was under the seat of the chair) from scalding her: she, being seated, was covered with another blanket, which kept the vapour from escaping.

never apply this medicine to the os uteri in cases of labour."

Case 21.—In this case the person was taken in labour with her first child. Every thing was going on right, excepting that the external parts were very rigid. Some of the ext. belladonna was procured, and when the head was in the perineum, and not before, it was applied. "It proved here of great benefit, as the external orifice dilated without the least difficulty, and the patient was safely delivered."

Case 22.—"In opthalmia, (says Mr. B.,) I have used this remedy with decided advantage. The first case of this description was that of a young man of nineteen years of age. He had inflammation of the conjunctiva, with catarrh. I ordered him the following lotion.

℞. Aq. Rosæ, ℥ iij.
Tinct. Bellad. ℥j.
Acet. Acid ℥j.
Fial. Lotio assidue applicanda.

"The first application dilated the pupils; and as he was using it he fell from his chair, and did not recover from his stupefaction for about a minute. The pupils remained dilated for a few hours. He discontinued the use of the lotion until next day, when I altered it as follows:

℞. Tinct. Bellad. ℥j.
Aq. Rosæ. ℥ vij.
Acet. Acid ℥ij. M. ft. Lotio.

"This he applied with impunity, and his eye soon recovered. I have since continued this formula in several cases of opthalmia, with the greatest success."

Mr. B. very properly cautions those who use the belladonna, to commence the administration of, whether externally or internally, always in small doses or applications, and afterwards gradually to increase it. If the least bad effect should arise, it should be laid aside immediately; but, if all goes on favourably, it ought to be increased slowly and prudently, until what is required of it be obtained; of course there will not then be any occasion to increase it, as long as the same effect continues.

Case of Double Perforation through the palatial Portion of the Maxillary Bone, with Fissure of the Soft Palate and Destruction of the Uvula, mechanically applied. By James Snell, Esq. Dentist, Member of the Royal College of Surgeons.

*** This case is highly creditable to the ingenuity of Mr. Snell; and the success which was the result, merits the most earnest attention of the faculty, in one of the most deplorable affections with which human nature can be visited. We shall notice it more efficiently, than our present limits will permit us, in a future Number.—E.

REVIEW OF NEW BOOKS, &c.

A NARRATIVE *of a* JOURNEY *to* LONDON, *in* 1814; *or a Parallel of the English and French Surgery, preceded by some Observations on the London Hospitals. By* Philibert Joseph Roux, Doctor in Surgery; second Surgeon of the Hospital of the Charité, &c. &c. (Cox and Son, Borough, price 7s. 6d. pp. 296.)

This interesting Work, notwithstanding the partiality so natural to Frenchmen for every thing that is French, is written with considerable judgment, spirit, and vivacity. The author commences by remarking on the respective merits and discoveries peculiar to each nation, (England and France,) by observing that

"A few surgeons of celebrity have flourished, at distant intervals, in Italy,

in Germany, and Holland. It is not long ago that Camper filled all Holland with his renown; Germany too, a short time since, boasted of Richter, Siebold, and Brüninghausen. At this very moment Italy opposes to us Scarper. But it is a truth, that the French and English surgery have been, since the revival of the art, and are, at this moment, the only rivals. Wiseman, both as to the period when he flourished, and the services he rendered to surgery, was the Paré of England: and from this æra, so remarkable in the history of our art, the two nations have never ceased mutually to oppose to each other, men eminent in this department. It would be difficult to determine whether the French or the English have had the greatest share in the immense improvements which the art has received in the course of the last century, and to the smaller number which the first years of the present have contributed."

How many diseases, continues the author, have been observed for the first time by one or the other! and still how many more new operations, or new operative proceedings, of which the French and English surgery dispute between them the invention! To give only a few examples, there is the circular amputation of limbs by the double incision, the first idea of which the English attribute to Chesselden, and which we claim in favour of J. L. Petit; there is the method of operating for external aneurism, by making the ligature of the diseased artery above the tumor, the fortunate idea of which occurred at the same time to Dessault and John Hunter, or rather, they rescued it from the oblivion into which it had fallen; there is the operation by incision for the fistula in ano, which, if not invented, has, at least, been brought to the greatest degree of simplicity, and highest state of perfection, by Pott and Dessault.

Among the improvements and discoveries which the author enumerates, as exclusively of French origin, are the nature of the cataract, better ascertained, as well as all the varieties of this affection. The method of extracting the crystalline lens, absolutely created by Draviel; that of treating the *fistula lacrymalis*, by dilating the nasal canal, and the most successful method for effecting its execution. The first descriptions of hernia of the brain, of the lungs, and of several kinds of abdominal hernia, so numerous and so different among themselves, both as to their respective seats, and to the different parts which constitute them; the treatment of strangulated hernia, of hernia in a state of gangrene, so well illustrated by Goursand, Pipelet, Louis, &c. The idea, certainly more ingenious than profitable to the art, of the lateral operation for the stone, properly so called, that is to say, of the operation performed in the perineum, in such a manner as to penetrate into the bladder on one side of its fundus, without encountering its neck, such, indeed, as it was conceived by Le Dran, and extolled for a time by Foubert and Thomas. The operation of Frere Jacques, the hypogastric lithotomy imagined by Franco, and brought to the highest degree of perfection by Frere Jacques, come the different methods of puncturing the bladder; the amputation of limbs at the articulations, and more particularly the extirpation of the arm, which Le Dran, the father, or perhaps Morand, first carried into execution, and which received a more regular character from Lafaye; and another operation still more ingenious, because Chopart was led to it to necessity, which increases industry, I mean the partial amputation of the foot at the double articulation of the astragalus and os calcis, with the scaphoid and cuboid bones.

These discoveries and inventions, which, Monsieur Le Roux observes, are but the principal ones among all those that could be cited, are in-

disputably our own, and will be an eternal honour to French surgery. But the English have likewise to boast of having enlarged the boundaries of the art in a number of instances.

"The perforation of the os unguis, in order to establish an artificial passage for the tears, in cases of complete obstruction of the nasal canal, is the discovery of Woolhouse.

"Chesselden created the operation of the artificial pupil, and, at the same time, was the first who conceived and realized the project of combating a blindness existing from birth, whether depending on cataract, or an imperforation of the pupil.

"It is to Chesselden, likewise, that we are indebted for the method of perforating the stenonian duct at a greater or less distance from its natural orifices, and on the inside of the mouth, in certain cases of salivary fistula of this duct, which resist every other treatment.

"The name *Maladié de Pott*, which we ourselves owe to that affection of the vertebral column, so frequent, in which there is always found, to a deformity of the spine, and a peculiar alteration of one or more of the osseous portions which compose the vertebral column, a weakness more or less considerable, or an almost complete paralysis of the inferior extremities; this name, I say, sufficiently points out, that it is to Pott we owe the first description of this disease. Nothing can be more exact than that which he has given; scarcely has any thing since been added to it; and experience has only confirmed the treatment which Pott first conceived.

"The first observations on congenital inguinal hernia are by Arnaud and Haller; but Pott and W. Hunter, uniting together fresh facts on this species of hernia, have connected the description of it with the general history of herniæ."

"The employment of caustic in the treatment of hydrocele, and the still more efficacious method of injection, belong to English surgery.

Among improvements and inventions which belong to English Surgery, the author mentions the experiments of Chesselden, in order to discover the best method of practising the lateral operation of lithotomy, by which the high operation was superseded; the nature of varicose aneurism by W. Hunter, although he asserts that this was antecedently known by Guattani, as well as that extraneous soft, cartilaginous, or even osseous bodies, sometimes formed spontaneously in those articulations, the surfaces of which are moistened by synovia.

Morgagni speaks of these bodies, and Paré, long before him, relates an instance of it. But Middleton, Simpson, and others, have collected parts on this kind of affection: and although Pechlin relates a case of one of these concretions formed in the knee joint, it is generally attributed to the English, to have been the first to practise this operation; "Which, (says Monsieur Le Roux,) I shall take care not to put in competition with a great many others, for importance and utility; because, notwithstanding some successes obtained in England by different surgeons, and in France by Dessault, this extraction of concretions of the joints exposes the patients to serious accidents, and has been fatal to a tolerably large proportion of the persons on whom it has been practised."*

The amputation by a flap in the continuity of the limb, is an invention of the English surgeons, who were also the first partisans of healing by the first intention, not only in the wounds succeeding the amputation just mentioned, but also in those resulting from the circular operation.

Our author next alludes to two operations, which have some affinity to one another, the fate of which, he observes, is not yet definitively determined, proposed by Mr. White of Manchester; viz. the cutting off the contiguous osseous extremities in false articulations, and the removal of the articular portions of carious bones, as a substitute for the am-

* This very operation has been performed at St. Thomas' hospital, by Mr. Travers, within the last month.

putation of the limb above the diseased joint—a two-fold invention, which bears "the stamp of true genius."

"No one can value more than I do, observes Monsieur Le Roux, the beautiful work of Scarpa on aneurisms; but the idea conceived, and carried into execution for the first time by Astley Cooper, of applying the method of Hunter to aneurisms of the carotid artery, by taking up this vessel on the side next the heart below the tumor; and the ligature of the external iliac artery for aneurisms in the groin, which aneurisms, hitherto reported incurable until this operation, conceived by Abernethy, was successfully performed by Cooper; these two operations, I say, will mark out an epoch still more brilliant in the history of the progress of surgery, with respect to the treatment of aneurism. It is to the English, likewise, that we owe, not the project of tying-up the auxiliary artery immediately below the clavicle, or even immediately above this bone, upon the first rib, but the first instance of success in this operation, which is much more difficult in the execution than the ligature of the external artery, and still more uncertain in its results."

We shall continue our analysis of this interesting work, by selecting the more conspicuous parts of it, in order to submit to our readers whether Monsieur Le Roux, as a Frenchman, has done any thing like justice to the surgical talents of the English.

NUGÆ CHIRURGICÆ; *or a Biographical Miscellany, illustrative of a Collection of Professional Portraits.* By William Wadd, Esq. F. L. S. Surgeon Extraordinary to the King, Fellow of the Royal College of Surgeons, London, and of the Societé de Medicine, Paris. Longman, Hurst, Rees, &c. 8vo. pp. 276. 1824.

Mr. Wadd's work, we are informed, owes its origin to a collection of professional portraits, the nucleus of which was a set of portraits presented to him by, or, might very well pass, with some exceptions, notwithstanding the intermixture, for a continuation of "AIKEN'S BIOGRAPHICAL MEMOIRS of Medicine in Great Britain, from the Revival of Literature to the Time of Harvey." The plan of the work is evidently the same, excepting that Mr. Wadd has arranged his characters alphabetically; whereas in Aiken's Biography, they proceed in chronological order. Many of Mr. Wadd's characters, particularly some of the more ancient, if not taken from the latter, bear, at least, the same impression. We do not mention this circumstance to lessen the merit of Mr. W.'s execution, which, in our opinion, is neat enough, and abounds with many facetiæ not to be met with in any other work of the kind extant. The portraits, many of them, as their names express, are by eminent masters—and there wanted only some cuts, in imitation of ancient coins, to the work itself, to give it a stronger degree of interest.

We shall selecta few of those characters, for the amusement of our readers, to which any anecdote or humour is prefixed; and refer them to the work itself for the general idea, &c.

BASTWICK, JOHN. In complete armour; a shield in his right hand and a bible in his left: on the shield is inscribed, "I fight the good fight of faith."

"Here stands one armed, who hath truth's cause maintained,
'Gainst error's captains, forces, taunts, high boasts;
God's word his weapon, might and strength he gain'd,
To rout them all, from the great Lord of Hosts."

Bastwick seems to have been too intent upon the reformation of government and religion, to have attended much to his profession. He wrote chiefly in polemics.

BATTIE, WILLIAM, M.D. Born 1704; was intended for the profession of the law. A fair opening for a physician happening at Uxbridge, induced him to settle in that quar-

ter. At his first coming there, the Provost of Eton, Dr. Godolphin, sent his coach and four for him, as his patient; but the doctor sitting down to write a prescription, the provost, raising up himself, said, "You need not trouble yourself to write; I only sent for you to give you some credit in the neighbourhood."

He was afterwards physician to St. Luke's hospital, which he resigned in 1764.—Died June 1776.—Buried at Kingston upon Thames.

Blacrod Henri. Médecin de la Faculté de Paris. "Il etoil philosophe, homme de cour, soldat, medecin, negotiateur." He died 1634.

Blair, Patrick. A surgeon at Dundee, who first acquired reputation by his dissection of an elephant. He was imprisoned for his attachment to the Stuarts in 1715, but, upon his liberation, came to London, and gained popularity on the sexes of the plants, published under the name of "Botanic Essays," &c.

Bright, Timothy, physician and divine, died 1615. The work by which he is principally known, is his "Treatise of Melancholy," 1586. He entertained very lofty ideas of the medical character. "No one," says he, "should touch so holy a thing that hath not passed the whole discipline of liberal sciences, and washed himself pure and clean in the waters of wisdom and understanding."

Browne, Joseph, L.L. M.D. prefixed to his "Treatise on the Blood," 1701.

Joseph Browne, a charlatan, was author of "the Modern Practice Vindicated," with a Letter to Sir John Floyer, concerning the further Use of Cold Baths," London, 1705, 8vo.; besides which he published, but very inaccurately, Sir Theodore Mayerne's Works, in folio. Brown also wrote against the circulation of the blood. In short, he was a mere tool of the Booksellers, and always ready. A libeller of the purity of Queen Ann's Whig Ministry, he was exalted to the pillory. But this Medico-Politico Quack had the assurance to continue the "Examiner" when discontinued by Swift, Prior, Atterbury, Oldsworth, and Mrs. Manley; consequently, it became as inferior to what it had been, as his abilities were to theirs.

Browne, Thomas, M.D.—Died 1683.—*R. White, sc.*

Author of Religio Medici, a paradoxical Book, translated into almost every language in Europe.

This learned person was of opinion, that love was a folly beneath a philosopher; and says, he "could be content that we might procreate like trees, without conjunction." He descended however from his philosophic dignity, and married an agreeable woman. His reason for marrying was, "because he could discern no better method of procreation."

Bulleyn, William. In his travelling dress.—Physician to Henry VIII.

"Surfeyte, age, and sicknesses, are enemys to health,
Medicines to mende the body, excell all wordly wealth:
Pisicke shall flourish, and in dainger will give cure,
Till death unknit the lovely knot no longer we endure."

He died 1576, and was buried in the same grave with his Brother Richard, who died 13 years before, in the Church of Cripplegate. He suffered a long and serious prosecution for unskilful treatment of a patient, who died of a fever.

Butler Gulielmus. Cantabrig. hujus ætatis princeps Medicorum. *S. P. fecit.*—Born 1535—Died 1617.

"When now the fates gan wonder, that their thrids
Were so oft tied again, half cut i' th' mids,

And Charon wanting his us'd Naulu sware,
He now a days did want of many a fare,
They all conspire, and found at last, that it
Was skilfull Butler, who men's lives could knit.
Almost untried, they killed him, and yet feared
That he from death by death would ghosts have reared."

CASE, JOHN. M.D. natus Lymæ in Com. Dorcesti—V. H. Van Hove, Sc.

A great quack, successor to Lilly, whose magical instruments he possessed.

"Within this place
Lives Doctor Case."

The following couplet was affixed to his pill-boxes:—

"Here's fourteen pills for thirteen pence,
Enough in any man's own con-sci-ence."

CORDUS, EURICUS. Wood-cut. died 1535.

Cordus, who was accustomed to receive his fees only at the termination of his patient's disease, describes, in a facetious epigram, the practitioner at three different times, in three different characters.

"Tres Medicus habet facies; unam, quando, rogatur,
Angelicam: mox est, cum juvat, apre Deus.
Post ubi curato, poscit sua præmia, morbo,
Horridus apparet, terribilisque Sathan.

Which is translated thus:—

"Three faces wears the Doctor; when first sought,
An Angel's—and a God's the cure half wrought:
But, when that cure complete, he seeks his fee,
The Devil looks less terrible than he."

CURRIE JAMES, M. D. F. R. S. *I. Hone pinx.* R. H. Cromack sc., 1807, physician at Liverpool.—Born 1756.—Died 1805.

"Freedom and peace shall tell to many age,
The warning counsels, thy prophetic page;
Art, taught by thee, shall o'er the burning frame
The healing freshness pour, and bless thy name;
And genius, proudly, while to fame she turns,
Shall twine thy laurels with the wreath of Burns.

DARWIN, ERASMUS, M. D. F. R.S. Author of Zoonomia. *S. J.* *Arnold pinx.*—*B. Pym* sc., 1801.—Born 1731.—Died 1802.

"Onward he steps, Disease and Death retire,
And murmuring Demons hate him and admire."—BOTANIC GARDEN, Cant. II.

FREIND, JOHN, M. D. *M. Dhal pinx.* G. Virtue sc., 1730.—Born 1675.—Died 1728.

There is no occasion to quote authorities in praise of a man whose works are a standing testimony of his merit, and was acknowledged by all to be, "Et scribendi et docendi magistrum."

"When Radcliffe fell, afflicted Physic cried,
How vain my power! and languish'd at his side.
When Freind expir'd, deep struck, her hair she tore,
And speechless fainted, and revived no more.
Her flowing grief no further could extend;
She mourns for Radcliffe, but she dies with Freind.

(To be continued.)

QUARTERLY MEDICAL REVIEW!! OR, DR. JOHNSON'S NEW SERIES OF CANT, FOR THE YEAR 1824, BEING BISSEXTILE, OR LEAP YEAR.

(*See his Preface.*)

"At the commencement of a new series some prefatory observations will naturally be expected," so we shall give them.—"The *encouragement of the public* MIGHT SEEM to demand OUR sincere thanks—but WE DOUBT (and with good reason no doubt,) whether the

public CARE much about them."—(Open confession is good for the soul)—"They look for *doings* rather than *sayings*." (Certainly Dr. J. it is your unquestionable turn to *do*—since, for the last four years, you have been *doing* nothing but *saying*. You, till lately, had no rivals to contend with—your supineness—your egotism and blarney roused the indignation of your "*respected contemporaries*," who could no longer suffer the pen of venality to be *wielded* with impunity by such a tame, time-serving, pithless, and indiscriminate critic in the medical world. You find it time now to bestir yourself, don't you?—Long-winded stale stories and whole sheets cut out of books at a time, and spun out to the greatest and most annoying extent, you find will not suite the taste of the day:—You laid your periscope aside too, some time ago, but your *pericranium* soon told you to resume it, when you found how the "land lay"—and what does it now contain? Have you an article in it that has not previously appeared in three or four different and distinct journals? And what, pray, is your paltry plea, or rather the drift of your cant, for chaunting it over again? Let us have it at once. Why—

"The scope and tendency of this review are now well known. The plan was, at first, considered somewhat UTOPIAN. Time has proved that it is perfectly practicable. While unincumbered with original communications, OUR PERISCOPE enables us to range through the whole galaxy, and cull out the choicest morsels.* But it will be said, we have them at second *(fourth, we say)* hand. So much the better. *(Nobody says this though but yourself.)* If these articles will not bear keeping for three or even six months, we had rather not ship them among our cargo.* There is in fact a great variety in these commodities. Some keep a week and no more. *(Check-mate for the "Lancet").* The moment they see the light they perish. Others keep a month, and then languish. If they stand three months, they are worth trial, and we import—*(that is, we over-stock the market)* the best samples from abroad to mix with the best specimens *(of "twice-told tales,")* which we can procure at home!!!"

But in wading through this detestable mummery, we have "shot ahead," too far. Let us return, then, to the "viewless winds"—"substantial facts and specious promises"—as "we choose to address the SENSE rather than the passions of our readers—their judgments rather than their imaginations—their interest rather than their amusement"—"The back numbers are out of print"—"re-printing in America"—"our brethren scattered abroad in the colonies, or distracted with the toils of private practice at home, cannot procure, and would not peruse, if procured, one-tenth of the effusions of the press in their original forms." (This is the very reason then, we presume, and a pretty idea, indeed, it shews that he entertains of them, that Dr. Johnson sends communications to the Repository and Medical Journals, that he may afterwards "cut them down" to the indolent taste of *his* readers—who prefer, it would appear, 'the scattered gleanings of a feast' to a sumptuous banquet. &c. Go to "Dr. Johnson, you must tell all this to the marines, for the sailors will never believe you"—again, mark the rant-

* This is not the only feature which the Quarterly Medico-Chirurgical Review has borrowed from us—See prospectus of our old series as well as new, &c. But why object to original communications? eh!

* Who would live upon salt-meat, when they can get fresh?

ing egotist; "these effusions, foreign and domestic, generally require the literary filter, or alembic—and WE are often astonished at the quantum of residue, *or* caput mortuum, which remains after the process is finished!"—"The task of conducting a Medical Review is at once *delicate, dangerous*, and *difficult.*"—Now, then, reader, let us shew you at once the delicacy, the danger, and difficulty of conducting a "Medical Review"—Let us unmask the mystery at once, by giving some choice specimens of

DR. JOHNSON'S NEW SERIES of BIBLIOGRAPHICAL BUFFOONERY "or Works for review since last quarter,"—*(teneatis risum amici.)*

1. "*In this letter Mr. Gurney complains bitterly of the injustice, &c. of a review in Mr. Brande's journal, &c. &c. We must refer to the journal for the various coups and contre-coups, which have been given and returned in this literary or rather scientific sparring-match.*"—Is this not holding with the hound and running with the hare?

2. "*This is the cheapest and most valuable book in any language. The plates alone are worth the money.*" Is this not plate-licking?

3. "*This is really a very valuable compilation, and does great credit to the judgment and research of the author. We shall notice it frequently in our forensic department.—Humph!*

4. "*This Essay contains most of what is known on the subject, besides two original cases. These last will be noticed in our periscope.—Heu!*

5. "From the conflicting testimonies that have been published respecting the physiology and pathology of the tread-mill, *we* cannot come to any positive decision; and *we* are not much inclined to gather our knowledge, on the present occasion, from personal experience. *We* much doubt whether the tread-mill will ever give entire satisfaction to those who honour it with their patronage. Custom, however, is almost omnipotent. *We* know what it does for the eels, when skinned alive—and Goldsmith, in his Traveller, (and travellers are allowed some license*) has assured us that, in Switzerland at least,

"*The rocks, by custom, turn to beds of down.*"

For our *parts, we* are much inclined to coincide with Mr. Peel, when he prescribes change of air from St. James's-street to Brixton, and change of employment from the wheel of fortune to the tread-mill. *Admirable! humane!! sensible!!!*

6. "WE *anticipated the success of this work, and are happy to find our anticipations fulfilled.* WE *have only to say to the able and indefatigable author* PERGE PEDE QUO CÆPISTE."—Pugh! Pugh! Pugh!!!

7. "*This is a well-written pamphlet, of which we shall take some notice in another place.*"—Poo! Poo! Poo!!!

8. "*This is an extremely useful sheet to hang up in the shop or surgery, &c. The author deserves great credit for the ingenious idea.*

9. "*This Journal (New-York Med. and Phys.) is on the plan of our respected contemporary* * * * *and appears to be conducted in a very respectable and independent manner. We wish the Editors every success.* * *The following extract* * *will give some idea of the mental activity of our New-York bretheren.*"

Here a lump of crude bombast is laid before us about the republication of the "Medico-Chirurgical Review," which certainly argues nothing in favour of the mental discernment of our "*New-York bretheren.*"

10. "*We need not say more to recommend it to the student, &c.*

* Late "Tour to the Continent," to wit.

11. "*This is a very meritorious production.*

12. "*Very creditable to the industry, talent, and zeal of the chemical school, &c.*

13. "*Dr. J. exhibits a very fair stock of information on the subject, &c.*

14. "*We recommend the publication strongly.*

15. "*This work appears to be one of merit and utility; when we receive the second volume we shall give some account of the publication to our readers.*

16. "*Thanks to the able conductors of the above work.*

17. "*We cannot too strongly recommend to our professional bretheren, the work of which these plates and descriptions are illustrative.*" Plate-licking again. (See Bibliographical Record, p. 244.)

Now, after these laconisms of the coarsest servile venality and indiscrimination, should any one apprehend either danger or difficulty from conducting a "Medical Review," we could only excuse him on the score of delicacy—an ingredient which, did Dr. Johnson possess it, would never have permitted him to descend to the alternative of tantalizing the good sense of his readers, with such mockery of reviewing. "Authors and publishers," says he, "will readily appreciate the *importance* of having their works recorded, with full length titles, on this list, which stands as a perpetual advertisement, so long as the Journal lasts, and as far as it extends."—Then, for the third time, the vain egotist reverts to the republication of the Journal in America,—a solitary circumstance of which, it is true, has once occurred—and which, he would fain have the world believe, is now actually and constantly the case: No such thing—brother Jonathan—that is "our New-York bretheren," are not so easily imposed upon as Dr. Johnson, with all his *soap*, would have credulous people to imagine.

Instead of republishing any of the numbers of the "Quarterly," we would rather, in the first place, suggest the propriety and less expensive mode of contracting for the back numbers, which, we well know, notwithstanding all the hubbub of being out of print, are sufficiently plentiful to supply more than our "bretheren of New-York," and old York into the bargain.

"Success to the NAVAL MEDICAL SUPPLEMENTAL FUND was given from the chair, and thanks returned by Dr. James Johnson!!!" (p. 252) But in what terms we are not told. J.

*** Further strictures on this journalist, and his new series, will be resumed next month, and successively continued.

MEDICO-CHIRURGICAL VARIETIES, &c.

AMPUTATION AT THE HIP-JOINT.

The subject of this operation, *(see plate)* lately performed at Guy's Hospital, is perfectly recovered; and it has since been circulated, that Lord Grosvenor has settled £50 per annum, for life, on the fortunate patient.

Relative to the nature of this herculean operation, we shall give the details of it in Sir A. Cooper's own words, delivered in the course of his lectures on amputation.

"This operation, (observed Sir Astley,) has been several times performed, and in several instances with success. I recollect the time when this operation was a little criticised by surgeons; and I remember the following story being told of

Singular case of a Successfull Operation of Amputating at the Hip Joint, performed January 17th. 1824. on William Jones, Aged 47, at Guys Hospital, by Sir Astley Cooper Bar.t Surgeon to the King &c. &c. &c.

London Published May 1st. 1824. by Mr. Cox Medical Bookseller to the London Hospitals.

Mr. Bromfield, who performed it. Mr. Bromfield was attending a nobleman, who observed that his hands were a little bloody; this led to some conversation about our profession, and Mr. Bromfield said he had just been amputating a man's thigh at the hip-joint. Good God! Mr. B., exclaimed the nobleman, how can you talk of such horrible things? Three or four days after, the nobleman enquired about the patient who had undergone the operation, and Mr. Bromfield replied, that he had lived forty hours after it. 'And was that all, said the nobleman, after putting the man to such dreadful agony!'

"The amputation at the hip-joint, however, gentlemen, has been so often performed with success, that it may now be considered as one of the established operations of surgery. Mr. Brownley, a military surgeon, first performed it during the late war: he did it without putting any ligature on the artery in the first instance—it was only compressed. Mr. Guthrie also performed this operation with success, during the late war. He also performed the amputation through the trochanter major, without securing the artery in the first instance; I compressed the artery myself in that case. The amputation at the hip-joint has been performed in the same way successfully by M. Larrey and many other surgeons; still, notwithstanding the great respect I entertain for these authorities, I am disposed to think that the operation cannot be safely performed without securing the artery in the first instance. When the artery in the first instance is not secured, what is likely to happen is this, viz. you have to divide the femoral artery as near to Poupart's ligament as possible, and to put a ligature upon it; the man in the mean time becomes so faint under the operation, that he will be unable to support it. I have, in such a case, been obliged to suspend the operation, to give the patient wine, and to chat with him in order to rouse the vigour both of his body and mind. The operation will certainly be most safely performed by tying, in the first instance, the femoral artery, under Poupart's ligament, above the origin of the arteria profunda. A question in the first place arises whether we should perform the operation of amputation at the hip-joint, when it can be done through the trochanter major? I say no. Unless the disease of the thigh-bone extends quite up to the joint, as is the case in which I recently performed the operation, it is undoubtedly better to saw through the trochanter major, than to cut the bone from the acetabulum. When the acetabulum is laid open, great constitutional irritation is produced by the suppurative process, —abscess after abscess arises, and the life of the patient is put into imminent danger.

"Though this operation has been occasionally performed with success, I feel it nevertheless my duty to impress upon your minds most strongly the danger to which it exposes the patient; it occasions the most violent constitutional irritation, and reduces the patient to the lowest possible state, so that he can with difficulty recover; whereas the operation of amputation through the trochanter major, is attended with very little risk. After the femoral artery is tied, there is no difficulty in the future steps of the operation; a doubt may arise whether the femoral artery is laid bare above or below Poupart's ligament, and to ascertain this, slit up the artery a little, to see whether the orifice of the arteria profunda is above or below. As you cannot form a very

large flap on the outer side, the principal flap must be made on the inner side. Pass your knife above the trochanter major, along the muscles, and having made your two flaps, the next point is to dislocate the head of the bone, which snaps as soon as the ligament is divided. The French operate with a very long knife, nearly as long as a sword; they pass it down directly into the capsular ligament, until it touches the head of the bone, carry it through the round head of the bone, and cutting through the muscles along the trochanter major, bring it out at the back of the thigh.

Perforation of the Stomach, recognized during Life.—From the Revue Medicale, for March.

J. B. Beneux, aged fifty-seven, was admitted at La Charité, in December 1823, having at the pit of the stomach an indolent indistinct tumour, which appeared to have its site in the left lobe of the liver. According to the account of the patient, it has been present about twelve months, and had succeeded to a violent blow on the part. No bad effect had been produced on the health of the subject, whose appetite was good, and who had neither fever nor vomiting: he was in moderate condition, and without any appearance of emaciation, while the expression of the countenance, and general aspect, conveyed no idea of any chronic disease. He remained in this state nearly a month, and M. Laenneo began to doubt the existence of the tumour, which at times was very indistinct, and suspected that M. Beneux only wished to take up his quarters in the hospital for the winter. In the beginning of January, however, he began to experience nausea and vomiting: these symptoms at first came on only in the morning, and the egesta consisted of stringy mucus, without smell. Soon afterwards, the aliments were vomited a short time after they had been received into the stomach; and from this period the patient began to lose flesh, the skin at the same time becoming sallow. The tumour remained without perceptible change, except that some pain was now excited by strong pressure. M. Laennec now suspected schirrus of the stomach. On the 15th of January, the matters vomited began to assume a brown appearance, and soon became exactly like coffee-grounds. On the 19th, the patient was seized all at once with acute pain in the abdomen, which came on immediately after swallowing some soup. At ten in the morning, when M. Laennec saw him, the abdomen was extremely painful on pressure, and sounding externally *(resonnant exterieurement)* on very gentle precussion; the features pinched; the pulse contracted, very small, and very weak. Judging from these symptoms, M. Laennec made the following remark in the report:—"Ventriculus hodie ruptus est in loco schirri, et jam peritonitis adest et tympanitis abdominalis." In explaining afterwards the reasons for this diagnosis, he founded it principally upon the sudden appearance of peritoneal tympanitis, which he recognized by a sensation analogous to that which a sheet of fine parchment, placed within the cavity of the abdomen, might have produced, and which he experienced in pressing the anterior part of the belly, or striking it very gently. As to the rest, this sensation was fugacious, and scarcely any of the pupils could discern it distinctly. Several leeches were applied to the left side, and the patient put on rigid diet. Some relief was given by these means, which were repeated next day; but

the patient gradually sunk, and died on the evening of the 24th, having become inconceivably emaciated during the last few days. The appetite, however, had returned, and some soup, which was allowed him, neither increased the pain or vomiting.

Examination of the Body.—The abdomen, on being struck, emitted the same lymphatic sound which had been perceptible during life. On cutting through the integuments, a considerable quantity of air was evacuated, which had little smell, and evidently came from the cavity of the peritoneum. This cavity contained, besides, about two pints of fluid, having a yellowish-brown colour, with numerous irregular flocculi. The liver was considerably diseased; but the principal interest was, of course, attached to the state of the stomach. On its anterior surface, it presented the appearance of furrows, converging towards the centre of the lesser curvature; being raised with caution, an oval-shaped ulceration was discovered on the posterior surface, and in the centre of this was a small perforation, through which the contents of the stomach had escaped. Being cut open along the great curvature, it presented internally a much more extensive ulceration, round which the coats of the viscus were considerably thickened and indurated, with a greyish semi-transparent matter connected with them. These appearances diminished in proportion as the distance from the ulceration increased, and finally vanished. The pylorus was not diseased. The pancreas, which was intimately connected with the stomach, was converted into a firm, white, medullary-looking substance; its rounded end alone being in a healthy state.

On Contagion.—We are informed by a distinguished correspondent, that an opinion expressed in the review of Dr. Paris and Mr. Fonblanque's work, has led to a belief, among our friends of the metropolis, that we are disposed to defend the doctrine of the non-contagious nature of plague and continued fever. As nothing could be farther from the intention of the writer of that review, than to espouse or advocate such a cause, we beg to make the following explanation. All which was intended to be alleged is, that, with respect to those varieties of domestic fever, which clearly originate in fatigue, unwholesome food, personal filth, and the like, *and which cannot be traced to contagion*, we do not think the evidence yet collected sufficient to prove *them* contagious in their nature;—that the affirmative opinion, however, is the safer one in relation to medical police, and, therefore, the opinion which we should always decidedly act upon;—but that facts do not warrant the strong expressions employed on the subject by Dr. Paris and his coadjutor;—expressions which, besides tending to suppress inquiry, cannot fail to convey to the unprofessional part of the public, unwarranted notions of the nature of contagion, and to expose an unprotected breach in the doctrine to the assaults of the anti-contagionists. But, as to the infectious or contagious nature of *some* forms of domestic fever, those, namely, which are always at least *traceable* to contagion, after what we have both seen and suffered, we should be blind and callous indeed, if we could disbelieve or doubt it. As some atonement for the misconceptions we have caused, we shall relate the following remarkable fact, which occurred not long ago in this city, and which, we think, deserves to be recorded; because, although

the doctrine of contagion scarcely requires farther support, it is well to leave its adversaries, if possible, not a single inch of ground whereon to agitate themselves.

During the height of the late epidemic fever of Edinburgh, namely, from the end of 1817 to the middle of 1820, of fifteen gentlemen who successively filled the offices, (seven in number), of physicians' and surgeons' assistants, in the Royal Infirmary and Fever Hospital, and who remained a moderate length of time at their duty, one only escaped the disease. In the course of the first seventeen months, sixteen cases occurred among ten persons; that is, five had it once, four twice, one thrice; and, with a solitary exception, the fever appeared in all, and each time, in its most violent, unequivocal, *exquisite* form. Yet, during the whole of that period, continued fever was almost, we will even venture to say, absolutely unknown among other young men of their rank in society, throughout the city. The only cause of disease, to which the gentlemen of the hospitals were especially exposed, and not their equals in rank and age throughout the city, was—contagion. The inference is inevitable. Lest it should be alleged, however, (and it has been alleged by some of the bigotted and prejudiced cavillers, who stand ever foremost in the ranks of the anti-contagionists), that fatigue could have uniformly produced so peculiar a form of disease, in so many persons collected together, we may add the following particulars. In the first place, their duty, though often laborious enough, was certainly not so fatiguing as that of thousands of their rank in other professions. But, waiving that consideration, it was singular that, except two, they were all peculiarly sound in constitution and robust in frame; nine were very much above the average as to strength—five of these even athletic; and the stoutest were soonest attacked. It is almost unnecessary to observe, that their mode of living was the best possible, and that the managers, knowing the risk they ran, paid every regard to their comforts. One circumstance only rendered them obnoxious to the disease, and accounts for so many having suffered. They were all of the age most susceptible of contagion, namely, from twenty-one to twenty-five. We have often demanded, but in vain, an objection to this fact. It was even submitted, four years ago, to the captious acumen of Dr. Charles Maclean, who granted that it was a very strong one, and said he must take time to consider it.—These particulars we owe to Dr. Christison, who was himself one of the gentlemen alluded to, having had the fever three times in fifteen months. To the accuracy of the general fact we can also bear the amplest testimony; indeed, it is familiar to every practitioner in Edinburgh.—*Edinburgh Medical and Surgical Journal.*

CHEMICO-PHILOSOPHICAL MISCELLANY.

Determination of the Question relative to the Origin of the Domestic Dog.—M. Desmoulins, considering, with Pallas, that the wild stock of all our old herbivorous animals still exists, notwithstanding the weakness of their means of defence and of preservation, as well as their limitation in respect to number, which bears no proportion to the multiplication of the species of the dog genus, and notwithstanding their various confinements to several islands, the Moufion to Corsica, the

Œgargus to Sardinia and Crete, &c.; has proved that the ox kind is not an exception, since it still existed in Poland not three centuries ago; that the domestic dogs again become wild, could not be destroyed; and that a species, which has not yet been reduced to subjection, still possesses means of maintaining itself in a state of independence; that no historical testimony gives evidence of the extermination in any extensive country of any wild animal analogous to the dog; that all the presently existing species of this genus are mentioned by ancient authors in the countries with which they were acquainted; that there existed dogs in both Americas before the arrival of Columbus; that, according to Peter Martyr and Oviédo, there existed, both in the Antilles and on the mainland, dogs of every description and colour; that the domestic dogs of the Antilles were not indigenous, and had been imported from the Continent; for, in the time of Oviédo, who, had seen them in great numbers on the Continent, they no longer existed in St. Domingo, where, in a famine, during Columbus's second voyage, they had been destroyed to feed the population; that the Caribs, at this period, having the preponderant power of the east, of the continent, and of all the islands, must have introduced their dogs, which were so numerous on the continent, according to Oviédo; that, at the present day, in the same countries, the natives train to the chase the wild dog of Cayenne, the *Canis Thoris* of Linnæus; that there is no proof of the Caribs having ever had any thing common in their origin or relations with the old continent; that their domestic dogs, therefore, had come from a wild species indigenous in their country, and that this species is necessarily either the grey wolf of Paraguay, the guaiacha of Brasil, or the wild dog of Cayenne, which is tamed at the present day, and which readily breeds with all the varieties of domestic dogs; that in the Papua Islands and in Australasia, there exists a wild species, the Papua dog or dingo, the resemblance of whose skull to that of our mastifs is not a decisive proof of the unity of the species, since resemblances equally great are very numerous among many widely separated species of mammifera, as has been so often established by M. Cuvier in his *Ossemens Fossiles:* Admitting the proofs already exposed by Guldenstædt (*Nov. Commen. Petrop.* t. 20,) of the derivation of the domestic dog from the jackal; but, considering that it is impossible to derive from the jackal, either those dogs which existed previously to their discovery in the Antilles and in both Americas, or the Papou dog, or the woolly dog of the Esquimaux, &c.; that Buffon has himself proved the fecundity of the connections of the domestic dog with the wolf, that consequently the blood of the wolf must have produced many of our large varieties, that the fox has also been in some measure mingled with them, as was known in the days of Aristotle; and that thus, exclusive of the jackal, there are three wild species in Europe and western Asia, which have contributed to produce varieties of our domestic dogs: M. Desmoulins thence concludes, that the numerous races of domestic dogs must be referred each in its own country to different wild species; that, however, the emigrations along with man, of each of these species of domesticated dogs, have produced crosses of one domestic species with another, and races which have thence resulted sometimes with another, and sometimes with one or

more of the wild species. Now, we know that the combination of the five wild species indicated, with all the domestic races, could easily give a still greater number of distinct races than the fifty or sixty at present known. It is not, therefore, possible to admit any longer a single primitive species of dog, now destroyed, from which could have sprung all the varieties of domestic dogs known, by changes produced by the mere influence of climate and domestication.—*Bullet. Universel.*

Action of Hydrocyanic Acid on Vegetable Life.—M. Becker has made many experiments, from which it results that hydrocyanic acid, prepared according to Vauquelin's process, destroys vegetables nearly in the same manner that it does animals. Seeds soaked in this acid are equally killed by it, and lose their germinating power. Delicate plants are killed sooner than those which are stronger, —(*Journal de Pharmacie*, p. 174. *April* 1824.)

Diurnal Variation of the Barometer.—The Edinburgh Philosophical Journal, conducted by Dr. Brewster; the Journal of the Royal Institution of Great Britain, conducted by Professor Brande; the Bulletin Universel des Sciences et de l'Industrie, published under the direction of Baron Ferassac, have announced that, according to a discovery made by Col. Wright, the mercury of the barometer, near the equator, rises and falls twice in 24 hours, with so much regularity, that this instrument may almost be employed as a measure of time.

We beg those readers of the Annales de Chimie, &c. who think that we communicate this discovery rather late, to remark that Goden, Bouguer, and Laundamire, made the same discovery nearly a century since; that since these academicians all travellers to the equinoxial regions have been engaged on the subject; that M. Humboldt, in 1807, published a very excellent work, for the express purpose of making known the true hours of the *maxima* and *minima*, and the extent of the oscillation (vide Geograph. des Plantes); that Lamanon, in the expedition under de La Peyrouse, Horner in that of Krusenstern, &c. &c. undertook similar researches; that by means of the averages, Duc-Lachapelle, at Montauban, M. Ramond, at Clermont-Ferrand, the astronomers of the observatory at Paris; M. Marqué Victor, at Toulouse, &c. &c. have proved that this diurnal variation exists also in our climates: lastly, that we never omit, in our accounts of meteorological observations for the year, to give the amount of the daily falling of the barometer, from nine o'clock in the morning till three in the afternoon, and also of rising, which is evident between the last-mentioned time, and nine at night.—(*Annales de Chimie et de Physique*, t. xxv. p. 334.

Analysis of the Argillaceous Iron Ore, by R. Phillips, F.R.S. &c.—It is well known that the greater part of the immense quantity of iron yielded by the mines of this kingdom is obtained from what is called the argillaceous iron ore. A specimen which I analyzed was of that variety, which is called at Low Moor Iron Works near Bradford, Yorkshire, *Black Iron Stone.*

Its colour, as its name imports, is nearly black; its sp. gr. 3·055, it yields easily to the knife, and becomes magnetic when heated by the blowpipe.

a. 100 grains of this ore reduced to powder and moderately dried on a sand bath, lost one grain, which was evidently mere hygrometric moisture.

b. As it effervesces strongly when

put into an acid, 100 grains were put into a vial containing sulphuric acid, the weight of which and its contents were together noted. After the effervescence was over, which took place slowly, it was found that 29·3 grains of carbonic acid were given out. The iron was evidently in the state of protoxide, for crystals of protosulphate of iron were obtained. Indeed no percarbonate of iron probably exists, or at any rate none has been described, and it cannot be formed artificially.

c. 200 grains of the ore were treated with muriatic acid; nitric acid was added to convert the protoxide of iron into peroxide. The solution was decomposed by ammonia, and the peroxide of iron precipitated, being washed, dried, and ignited, weighed 97·5 grains. On repeating the experiment the mean result was 96·15 = 48·075 per cent. The iron in the ore exists as already mentioned in the state of protoxide, and as 40 peroxide are equivalent to 36 protoxide, 48·075 are equal to 43·26 protoxide of iron, which is the quantity contained in 100 grains of the ore.

d. The residuum insoluble in muriatic acid was of a dark colour, and after being moderately dried, it was heated to redness in a platina crucible; by this it became perfectly white, and lost 5·33 grains, which is the weight of the carbonaceous matter. The insoluble residuum, consisting of silica and alumina, gave a mean of 18·12 per cent.

e. The ammoniacal solution, after the separation of the iron, was treated with carbonate of ammonia; by this a quantity of carbonate of lime was thrown down; it weighed in one experiment 7, and in the other 6·5 grains, giving a mean of 3·74 of lime, which of course existed in the ore in the state of carbonate.

f. The ammoniacal solution, evaporated so as to expel all excess of ammonia, was treated with prussiate of potash; a precipitate of a light pinkish hue was obtained, but the quantity was too small to allow of determining the quantity of oxide of manganese which it indicated.

It will then appear that the ore, usually, but improperly called argillaceous iron ore, is in fact a carbonate of iron, consisting of

a	Moisture	1·0
b	Carbonic acid	29·3
c	Protoxide of iron...	43·26
d	Carbonaceous matter	5·33
	Silica and alumina	18·12
e	Lime	3·74
		100·75

As an atom of carbonic acid is represented by 22, and one of protoxide of iron by 36, the 43·26 of protoxide which the ore contains must be combined with nearly 26·4 of the 29·3 of carbonic acid, leaving 2·9 to combine with 3·74 of lime, a quantity of carbonic acid which exceeds but little the requisite proportion, and which will not account for the excess in the analysis. Although in this ore from Yorkshire the quantity of oxide of manganese is extremely small, there are some of the ores in Wales which contain nearly 10 per cent. of it.—*Annals of Philos.*

Hydriodate of Potash.—M. Taddei proposes the following method of preparing this salt: dissolve iodine in spirit of wine, and pour repeatedly a solution of hydrosulphuret of potash into the solution of iodine; the fluid becomes turbid, and changes from the blackest brown to a chesnut colour, and this, diminishing in intensity, gradually becomes flesh coloured, and afterwards milk white. At this period the conversion of the iodine into hydriodic acid is effected; and if the liquid does not become turbid on the addition of a few drops

of hydrosulphuret of potash, the operation may be regarded as complete. After standing a few minutes, the precipitated sulphur is to be separated by decantation or by the filter, the mixture is then to be distilled to procure the alcohol employed, and the residuum is to be evaporated to dryness in an open vessel to obtain the hydriodate of potash.—*Giornale di Fisica, etc.* 1823.)

Volatility of Salts of Strychnia.—M. Ferrari gives the following process for this purpose: solutions of salts of strychnia slightly acid when exposed to a heat of 212°, so as to be concentrated, then become volatile and the salt evaporates. This property has been remarked in the sulphate, nitrate, muriate, and acetate, and is believed to belong to all the salts. It has been remarked by M. Collaud and others, that the sulphate of quina is also volatile, and M. Ferrari, on repeating the experiments with the muriate and nitrate of quino, found it also to happen with them. The solutions, on being heated in a tinned copper vessel, gave out vapours which, when breathed, were found to be highly bitter. The salts vary in the extent of this property, and it is also affected by the degree of acidity, and of concentration of the solution.—(*Gior. de Fisica,* vi. 460.)

Crystallization of the Sub-carbonate of Potash.—M. Fabroni describes the following process for the crystallization of this salt. Make a solution of pearlash in water, and evaporate it until of specific gravity 1·57. Allow it to cool, when all extraneous salts will be deposited; separate the fluid and again concentrate it until of specific grav. above 1·6. The fluid will now be of a light green colour, and strong alkaline odour; place it in deep vessels, as glass jars for instance, and the sub-carbonate will soon crystallize in long rhomboidal white laminæ, situated vertically and parallel to each other; one extremity will touch the bottom of the vessel, and the other be attached to a saline crust on the surface of the liquid. When cold, the mother liquor will be found of specific grav. 1·6, but if further consecrated and again cooled, more crystals will be obtained; and this may be continued until the whole has been crystallized. (*Ibid.* 45.)

LONDON MECHANICS' INSTITUTION.

On Wednesday evening, 19th ult., Mr. Phillips delivered his fifth Lecture on Chemistry, and having stated in his previous discourse that there were substances which could not be melted by the most powerful heat, he proceeded to illustrate this remark by an experiment on *Wood,* which was a substance of this description. Some sawdust being placed in a retort was exposed to the action of a strong heat, and it was made evident, that though heat could not bring it into a state of fusion, it became decomposed, and produced *carbon, vinegar,* or *acetic acid, water,* and *inflammable gas.* The Lecturer then exhibited an experiment to shew the difference between phosphorescence and ignition, by throwing *phosphate of lime* upon a plate of iron moderately heated, when it immediately phosphoresced with a pale greenish light; but having once produced this effect, it could not be made to phosphoresce a second time, whereas the same substance might be ignited repeatedly.

Mr. Phillips then continued his remarks on *Combustion,* as produced by free or uncombined heat. Combustibility was that property of bodies by which they gave out much light and heat, owing to the *flame*

with which they burnt. Combustible bodies evolved heat by chemical action, and gave out more light and heat than they received, but, unlike bodies merely ignited, substances by combustion underwent great changes as to their chemical nature, and acquired properties totally distinct from those which they previously possessed. *Iron* heated in *oxygen* or vital air burnt with great light, and combining with the oxygen, became *oxide of iron*, which was red and pulvurulent, and no longer magnetic; the oxygen was absorbed and rendered solid by its combination with the iron, and though the oxide of iron might be heated or ignited, it could not undergo combustion again.

After shewing by experiment the principle upon which the *gasometer* acted, the Lecturer, by means of its operation, filled a glass vessel with oxygen, and elucidated the great changes produced in bodies by their combustion in this gas; thus charcoal, when made to undergo combustion in oxygen, emitted coruscations of brilliant light, and was converted into a gas so totally unlike either oxygen or charcoal, that it no longer supported combustion, and burning substances immersed in it were immediately extinguished.

The theory of combustion was of great importance in chemistry, as its most striking phenomena were produced by combustion. Lavoisier had adopted the theory of Dr. Priestley, with some alterations, and he considered that when bodies begin to burn, the solid base of the oxygen combined with them, and increased their weight, and that light and heat were separated from it. *Oxygen gas* being a compound of the ponderable substance *oxygen* with *light* and *heat*; but though it was an undoubted fact that the weight of bodies in combustion was increased by their combination with oxygen, it was by no means so clear that the light and heat emitted proceeded from this source, as combustion might take place when there was neither oxygen nor any other gas. The Lecturer then, by several interesting experiments, shewed the various colours produced by the combustion of different substances, such as *copper* and *boracic acid* with spirits of wine, both of which burnt with a green flame, while *strontian* mixed with other substances, imparted the vivid red flame frequently used in theatrical scenery.

Our limits will not permit us to particularize the numerous experiments and observations introduced during this interesting lecture, for the purpose of illustrating the effects of combustion, the causes of light and heat, and the nature of flame, and we can therefore only state concisely, that a considerable portion of the discourse was devoted to a minute description of Sir Humphrey Davy's *safety lamp*, which was surrounded by a *wire gauze*, and as the inflammable air in the mines could not be set on fire without an intense heat, the lamp might be used with perfect safety, because the flame could not penetrate the wire gauze which encompassed it; and though the metal of which it was composed should be made red-hot, it would not cause the inflammable air to explode, for this effect could only be produced by its coming in contact with *flame*.

Professor MILLINGTON, in his lecture of Friday evening, May 21, continued his observations on the third mechanical power, viz. the *pulley*, and after briefly recapitulating the principles upon which it acted, exhibited pulleys of several different kinds, and shewed that the mechanical advantage gained by

them increased according to the number of sheaves or blocks made use of; thus, by using two single pulleys, two hundred weight could be raised by applying the acting force of one, and if three cords were employed, by introducing a double block, as each cord supported one-third of the weight, a triple power was obtained, and a force of one hundred weight would be equal to a resistance of three. It would, therefore, seem, that the power of the pulley might be increased to infinity by increasing the number of sheaves; but this was found impracticable, because, when the number of lines was multiplied to any considerable extent, they were not equally strained, and the great increase of *friction* materially diminished the mechanical operation of the pulley; it was therefore desirable, if possible, to destroy the friction, and several expedients had been tried for the purpose of producing this effect. Mr. Smeaton, the able architect, who erected the Edystone Light-house, had adopted a different method of reeving his blocks, by using an uneven number of sheaves, and causing the greatest strain to act in the centre, by which means a more correct balance was preserved, and the pulley prevented from falling on one side. Mr. White's patent pulley was of a conical form, the diameters of the sheaves increasing in arithmetical proportion: and Mr. Garnett's contrivance consisted in the introduction of friction-wheels, containing six small rollers on the inside, and thus converting friction of one kind into friction of another. In calculating the advantage gained by the pulley, the theoretical power must not be strictly relied on, as it was necessary to make considerable allowances for friction, &c. The Lecturer concluded this part of his subject by explaining the operations of the *running blocks* used on-board ships, and which double the usual power was obtained by making both the upper and lower blocks moveable, through the intervention of a single fixed block, but though in this case 200 pounds might be raised by an acting power of 50, the cord must be drawn to a length four times as great as the height through which the weight was raised.

The *inclined plane* was the fourth of the mechanical powers, and consisted merely of a rise, slope, or hill, This power could seldom be introduced into machinery, but was applicable to drawing loads up-hill, raising casks from cellars, &c. It might appear at first sight that no mechanical advantage was gained by the inclined plane, but this was not the case, for if it was required to raise a weight to a certain distance from the surface of the earth, it was evidently much easier to slide it up an inclined plane than to lift it perpendicularly. The power gained by the inclined plane was found, by comparing its height with the length of its surface, or dividing the latter by the former; thus, if the face of the inclined plane was twice as long as its perpendicular height, a weight of one hundred pounds would be moved along it, by exerting a force of fifty. The Professor further illustrated this subject by placing the model of a truck upon an inclined plane, to represent a load going up a hill. The truck weighed twelve ounces, and a string being attached to it, which passed over a pulley at the top of the inclined plane, it was seen that a weight of six ounces hung to the string was sufficient to preserve an equilibrium with the truck in any part of the surface of the plane, which was exactly twice its height, and when a further inclination was

given to it, so that its height was only one-third of its length, four ounces were found capable of balancing the truck, and a small additional weight drew it up the hill.

The fifth mechanical power was the *wedge*, which was formed like two inclined planes placed together. The powers of the wedge was gained by percussion, or the blows of a hammer, &c. and this useful instrument being introduced into a small cleft and then driven, overcame the attraction of cohesion, and split timber, &c. with great force. Its power was very nearly allied to that of the inclined plane, and if the timber split close to the wedge, like oak, &c. it was calculated by the dimensions of the wedge alone, but if the cleft extended beyond the point of the wedge, as in the instance of deal, a greater power was obtained, and the additional distance must be taken into consideration. It was a remarkable circumstance that there had been a disagreement in opinion among scientific men, as to the manner of ascertaining the power of the wedge; some contending that its power was as half the width of the back to the whole length of the face, while others were of opinion that it was the entire width of the back to the entire length of the face. The Professor was of the latter opinion, which he elucidated by an appropriate experiment.

The sixth and last of the mechanical powers was the *screw*, and it had been maintained that this could not be properly called a mechanical power, because it could not be used singly, and from the great friction it encountered, required the collateral assistance of the lever; but the screw actually produced a very great mechanical power, which was calculated by dividing the circumference of the screw by the distance between its threads. The screw was an inclined plane wrapped round a cylinder, and its power was found in the same manner, for it was evident that if a sufficient quantity of inclined plane was applied to a cylinder to go exactly once round it, the length of this inclined plane would equal the circumference of the screw, and its perpendicular height would be the distance between the threads; it followed, therefore, that the smaller the threads were, the greater was the power obtained. Printing presses, and almost all others, depended upon the power of the screw, but they also required the assistance of the lever, and frequently with a heavy weight attached to it, to produce a greater degree of *momentum*. The screw was also of great utility for the purpose of measuring very minute distances.

Having thus gone through the whole of the mechanical powers, the learned Professor stated, that he should, on Friday next, shew their application to machinery, and make some further remarks on the manner of calculating their powers, as well as endeavour to demonstrate the impossibility of *perpetual motion*. He also observed, that the next lecture would conclude the present course.

Thursday, May 28.—Mr. Phillips having, in his preceding lectures on the science of chemistry, treated of the various effects produced on matter by the operation of heat, viz. expansion, fluidity, vaporization, ignition, combustion, &c. proceeded, on Wednesday evening, to explain the modes in which *free* or *uncombined heat* was communicated from one substance to another. When bodies of different temperatures were placed in contact with, or near each other, that body which was at the highest temperature parted with its excess of heat till the tem-

perature of both was equal. This fact was so obvious, as hardly to admit of illustration; but, on examining the manner in which heat emanates from bodies at high temperatures, it was found to be effected in two modes, part of it being communicated *slowly* to the matter in contact, and conducted through the particles of the body from one substance to another, and thence to other bodies, which was called the communication of heat by *contact* or *approach*; and another part of the heat being communicated with great *rapidity* and in right lines, or by *radiation*.

With respect to the first mode of communication, viz. by *contact*, or *approach*, the Lecturer observed, that no substance could retain a high temperature when surrounded by colder bodies, nor remain cold, or at a low temperature, when surrounded by hot bodies, for, however unequal the degrees of heat might be at first, it became gradually diffused till all the contiguous bodies were at an equal temperature, though the heat was communicated with various degrees of rapidity. This was exemplified by a common urn, in which the hot iron parted with its excess of heat to the metal which enclosed it, the metal to the water, the water to the urn itself, and the latter to the surrounding atmosphere, and this communication proceeded till all the different substances became perfectly cold. If a bar of red-hot iron was exposed to the air, it did not retain its heat, but gradually cooled till it was of the same temperature as the atmosphere; and if it was cooled by placing it in ice, and then removed to a warm room, it became warmer, till its temperature was equal to that of the room. A body became hot or cold sooner in a material medium than in a vacuo, and its temperature suffered alteration with different degrees of celerity, according to the nature of the bodies surrounding it; thus a thermometer at a high temperature cooled more rapidly in water than in air, though the water and air in which it was placed were both exactly at the same temperature.

The celerity with which heat was communicated by different bodies varied according to their respective natures, and the different degrees of rapidity with which they became heated or cooled depended upon that property of bodies which was called their *conducting power*.—Those bodies which easily altered their temperature by communication, were better conductors than those which either received or parted with their heat slowly. An earthen vessel, containing boiling water, might be held in the hand for some time without inconvenience, whereas a metallic vessel of the same thickness could not be held for a moment, which was owing to the better conducting power of metal. Wood was a bad conductor, as the heat travelled very slowly through it, and for this reason wooden handles were frequently attached to metallic vessels. The Lecturer further illustrated this subject by placing some phosphorus on two plates of glass and copper of equal thickness, and exposing them at some distance from each other to an equal degree of heat, communicated by the flame of a spirit lamp, when it was seen that the phosphorus on the piece of copper was very soon set on fire, while that which had been placed on the glass remained a long time unconsumed, because the glass was a worse conductor of heat than the copper; and if this experiment had been reversed, and both the substances heated sufficiently to fire the phosphorus, the glass would have retained its heat long after the cop-

per had parted with it, because those bodies which receive heat slowly, also part with it slowly.

The circumstance upon which the *conducting power* of bodies generally depended was their *density*, as it was usually found that their density and conducting power bore some proportion to each other; but there was a curious exception to this rule, for *platina*, which was the heaviest or the most dense of all metals, was the worst metallic conductor. Animal and vegetable substances were bad conductors, and it was found that the same kind of matter, in different states possessed a different conducting power; thus iron-filings were a worse conductor than iron, and saw-dust than wood, because the power was diminished by the air which filled their numerous interstices. If a basin of water and a basin of mercury were both at the temperature of 60 deg. the latter would feel much colder to the hand than the former, because mercury was a better conductor than water, and therefore conveyed the heat faster from the hand; and for the same reason iron felt colder than marble, and marble than wood, though their temperature was exactly equal, and a flannel shirt felt warmer to the body than a linen one, not because it was actually hotter, but because being a worse conductor, it retarded the transmission of heat from the body.

Upon comparing the conducting powers of solids, fluids, and gases, it was found that all common fluids, such as water, and also air, which was composed of two gases, were bad conductors of heat, which they transmitted in consequence of the great mobility of their particles, those which were heated being carried off and coming into contact with those which were not heated. Fluids communicated heat much slower than solids, particularly downwards, and this was proved by an experiment with the air thermometer. If the hand was applied to the bulb of this instrument, the heat communicated was sufficient to expand the air it contained, and cause a very sensible depression of the thermometer; but a small one being placed in a vessel of water, and confined by a weight, so that the bulb reached to within a quarter of an inch of the surface, some ether was poured on the water and set on fire, and, notwithstanding its great heat, the water possessed so little power to conduct the heat downwards, that the air remained in the bulb immediately below the flame without affecting the fluid in the thermometer at all. After some other experiments and observations on the same subject, the Lecturer stated, that as heat was transmitted very slowly through gases, they communicated their heat slowly to other bodies; thus metal would burn at 120 degrees, and water would scald at 170, but air might be heated to 240, and yet the human body could bear it, which had been experienced by Sir Joseph Banks, Dr. Fordyce, and others.

Mr. Phillips then proceeded to consider the transmission of heat by radiation, as distinguished from its communication by contact through solids and through fluids by the mobility of their parts. At the commencement of the Lecture, he had filled with boiling water two metal vessels, exactly similar to each other, except that one was coated with lamp-black, while the other remained bright, and a thermometer was placed in each. Upon examining the thermometers at this period of the Lecture, that which had been placed in the dark vessel stood at 135, and the other at 146, a variation which must have been occasioned by some other cause than the

conducting power of the vessels, which was exactly equal in both, and this cause was the communication of heat by *radiation*, which was greatly influenced by the surfaces of the vessels. All polished vessels retained heat better than those which were deprived of their lustre, and as dark vessels were the best *radiators* of heat, bright ones were the best *reflectors*. The Lecturer then exhibited an interesting experiment, by placing two large concave mirrors, or reflectors, opposite to each other, at the distance of several feet, with a ball of red-hot metal near the centre of one of them, the heat from which was reflected to a focus not far from the opposite mirror. In this focus, or point, where the greatest heat was concentred, some phosphorus was placed on a piece of copper, and the heat radiated from the reflector soon set it on fire. It was evident that the heat which produced this effect was caused by *radiation*, and not by *communication* or *approach*, because the air-thermometer, when placed near the red-hot ball, was not so much affected by the heat as when placed further off, or in the situation where the phosphorus had been fired, which was at a considerable distance from the ball. If the mirrors had been black instead of bright, all the effect on the phosphorus would have been lost, and the mirrors would have become hot, instead of remaining quite cold, as in the present experiment. It had been supposed that cold was radiated as well as heat, because if a quantity of ice was substituted for the ball, it would have exactly the contrary effect on the air-thermometer; but this might be better accounted for on a different principle, for in this case the thermometer was the hotter substance, and radiated its heat, and the effect was therefore produced by the radiation of heat from the thermometer, and not of cold from the ice.

Mr. Phillips concluded by stating, that as he had now shewn the various effects produced by free, thermometrical, or uncombined heat, he should in his next Lecture illustrate the nature of concentrated heat, or heat in a latent state.

OF REAL AND APPARENT DEATH.

If life be defined that power by which organized beings are enabled to resist the physical and chemical operation of surrounding agents, it follows, that death must be marked by the occurrence of those phenomena to which the elective attractions, no longer suspended or controlled, will necessarily give rise: hence putrefaction has been considered, by many authors, as the only certain sign of dissolution. Unfortunately, however, this process of decomposition does not immediately display its agency by visible effects: the countenance has remained unchanged for a considerable time after death, and cases have occurred in which its colour and complexion have not only been preserved, but even heightened. This difference in the celerity with which the body putrifies did not escape the observation of the ancients, and, like every other mysterious occurrence, was attributed by them to divine interposition: we accordingly find, that their poets mentioned those who preserved the appearance of freshness after death as favoured persons, who had fallen by the gentle darts of Apollo and Diana. Thus Hecuba declares, that Hector, although dead for twelve days, still remains fresh, like one who had died by the hands of Apollo. On the other hand, in certain morbid states of the living frame, so feebly do the powers of life resist the operation of

physical agents, that, if the body cannot be said actually to enter into a state of putrefaction, it may at least assume appearances so analogous as to be mistaken for it. The test of death, therefore, must rather be sought for amongst those signs which indicate the quiescence, or cessation, of the functions of life, than from those which manifest the decomposition of the organs by which they are performed: and here, again, it may be imagined that no difficulty or fallacy can occur; —the total cessation of respiration, pulsation, sensation, and all motion, it might be supposed, would indicate, to the least experienced, the departure of life; while the general aspect of the body, its pale and livid hue, the coldness of its surface, and the stiffness of its limbs, we might conclude were signs so palpable and satisfactory, as to defy the possibility of doubt. To the skilful medical practitioner, we apprehend, such signs must ever be unequivocal; but we are not prepared to say that a common observer may not be sometimes deceived by them. In cases of extreme debility, as in the latter stage of fever, and where the patient is confined in vitiated air, the exhaustion may be so considerable as to lend all the appearance of death. Indeed, that such cases have occurred, we have no less a testimony than the philanthropic Howard, who, in his work on prisons, says, "I have known instances where persons, supposed to be dead of the goal-fever, and brought out for burial, on being washed with cold water, have shown signs of life, and soon afterwards recovered." Hippocrates, in his Epidemics, also mentions the case of a woman, who, being in appearance dead from fever, was recovered by throwing thirty amphoræ of cold water over her body. Diemerbroeck relates the case of a rustic, who, having appeared to die of the plague, discovered, after three days, no signs of respiration; but, on being carried to the grave, recovered, and lived many years afterwards: and Paul Zacchias relates an analogous case, which occurred at the hospital of Santo Spirito at Rome. At a period when the small-pox raged with such epidemic fury, and physicians so greatly aggravated its violence by their stimulating plan of cure, there can be no doubt but that many persons were condemned as dead, who afterwards recovered.

Amongst the numerous cases that might be cited in support of this opinion, the following may be considered as well authenticated:—The daughter of Henry Laurens, the first president of the American Congress, when an infant, was laid out as dead, in the small-pox; upon which the window of the apartment, that had been carefully closed during the progress of the disease, was thrown open to ventilate the chamber, when the fresh air revived the supposed corpse, and restored her to her family. This circumstance occasioned in the father so powerful a dread of living interment, that he directed by will that his body should be burnt, and enjoined on his children the performance of this wish as a sacred duty.

We can also imagine that women, after the exhaustion consequent upon severe and protracted labours, may lie for some time in a state so like that of death, as to deceive the bystanders. A very extraordinary case of this kind is related in the Journal des Sçavans, Janvier 1749.

Dr. Gordon Smith, in his work on Forensic Medicine, has observed, that in cases of precipitancy or confusion, as in times of public sickness, the living have not unfrequently been mingled with the dead;

and that, in warm climates, where speedy interment is more necessary than in temperate and cold countries, persons have even been entombed alive. We feel no hesitation in believing that such an event may be possible; but the very case with which the author illustrates his position is sufficient to convince us that this occurrence would be highly culpable, and could only arise from the most unpardonable inattention. "I was," says Dr. Smith, "an eye-witness of an instance in a celebrated city on the continent, where a poor woman, yet alive, was solemnly ushered to the margin of the grave in broad day, and whose interment would have deliberately taken place, but for the interposition of the by-standers." If the casual observer was thus able to detect the signs of animation, the case is hardly one that should have been adduced to show the difficulty of deciding between real and apparent death. Many other illustrations might be adduced, but it is not our intention to amuse the reader with a relation of those numerous *nugæ canoræ*, that enliven several popular productions on the subject of *trances*, premature interments, and extraordinary resuscitations. The public have always betrayed a morbid curiosity upon the subject, and the stories of persons buried alive have ever found a ready access to our credulity, as well as to our compassion.

Amongst the different anecdotes which have been brought forward in support of the popular belief in the frequency of living interment, and in proof of the fallacy of those signs which are commonly received as the unerring indications of death, we read of numerous instances where the knife of the anatomist has proved the means of resuscitating the supposed corpse. Philippe Peu, the celebrated French accoucheur, relates himself the case of a woman, upon whose supposed corpse he proceeded to perform the cæsarean section, when the first incision betrayed the awful fallacy under which he operated. The history of the unfortunate Vesalius, physician to Philip II. of Spain, furnishes another instance, upon which considerable stress has been laid: upon dissecting a Spanish gentleman, it is said, that, on opening the thorax, the heart was found palpitating; for which he was brought before the Inquisition, and would probably have suffered its most severe judgment, had not the king interceded in his behalf, and obtained for him the privilege of expiating his offence by a pilgrimage to the Holy Land.

M. Bruhier also relates a case, on the authority of M. l'Abbé Menon, of a young woman, who was restored by the first incision of the anatomist's scalpel, and lived many years afterwards. With respect to the instance of Vesalius, we would make this general observation, which will probably apply to most of the cases on record:—that the movements, which have been observed on such occasions, are not to be received as demonstrations of life; they merely arise from a degree of muscular irritability, which often lingers for many hours after dissolution, and which, on its apparent cessation, may be even re-excited by the application of galvanic stimuli.

The author of the present chapter had once an opportunity of witnessing a most striking manifestation of the popular feeling to which he has just alluded:—A sailor, who had died suddenly on-board a vessel in Mount's Bay, was sent on shore for interment on the same evening. This indecent haste in consigning the yet warm corpse of a human being to the grave, excited a very strong and

natural feeling in those to whom the fact was communicated. In a few hours the knowledge of the circumstance became general in the town of Penzance, and imagination (which, in cases that interest the feelings, is always ready to colour each feature with the hue most congenial to the fancy,) soon represented the case as one of living interment, and by midnight the impression had produced so strong an effect upon the credulity of the town, that many hundred persons assembled at the house of the mayor, and insisted upon the disinterment of the body. The author, in his professional capacity, was called upon to accompany the magistrates in the investigation, which was accomplished by torchlight, amidst an immense concourse of people. The body was disinterred, when, it is almost needless to add, that not the slightest mark was observed that could in the least sanction the popular belief so readily adopted, and enthusiastically maintained.

Within the last few years, a singular and unphilosophical work has appeared from the pen of a learned divine, which is well calculated to cherish the public credulity upon the subject under discussion, and to excite many groundless alarms, as well as unjust expectations, respecting the possibility of latent life. The reverend author, it must be confessed, has furnished a practical proof of his talents in his favourite art of resuscitation, by recalling into life the numerous idle tales and superstitious histories that we had hoped had long since been for ever consigned to the "tombs of all the Capulets."

The histories of persons having been buried alive, or recovered after apparent death, are not, however, confined to the annals of modern times: we are informed by Diogenes Laertius, that Empedocles acquired great fame for restoring a woman, supposed to be dead, from a paroxysm of hysteria; and Pliny, in his Natural History, devotes a chapter to the subject, under the title of "*De his qui elati revixerunt;*" in which an interesting case is related of Avicola, whose body was brought out and placed on the funeral pile, the flames of which are said to have resuscitated the unhappy victim, but too late to allow it to be rescued from its powers: but such cases merely go to show that the common observer may be deceived. We feel no hesitation in asserting, that it is physiologically impossible for a human being to remain more than a few minutes in such a state of asphyxia, as not to betray some sign by which a medical observer can at once recognise the existence of vitality; for, if the respiration be only suspended for a short interval, we may conclude that life has fled for ever. Of all the acts of animal life, this is by far the most essential and indispensable: *breath* and *life* are very properly considered in the Scriptures as convertible terms; and the same synonym, as far as we know, prevails in every language. However slow and feeble respiration may become by disease, yet it must always be perceptible, provided the naked breast and belly be exposed; for, when the intercostal muscles act, the ribs are elevated, and the sternum is pushed forward; when the diaphragm acts, the abdomen swells. Now this can never escape the attentive eye; and, by looking at the chest and belly, we shall form a safer conclusion than by the popular methods which have been usually adopted, such as the placing a vessel of water on the thorax, in order to judge by the stillness or agitation of the fluid; or holding the surface of a mirror before the

mouth, which, by condensing the aqueous vapour of the breath, is supposed to denote the existence of respiration, although too feeble to be recognised in any other way.

"Lend me a looking-glass:
If that her breath will mist or stain the stone,
Why then she lives."—*Lear*, act v. sc. iii.

For the same purpose, light down, or any flocculent substance, from the extreme facility with which it is moved, has been supposed capable of furnishing a similar indication; but the result must not be received as an unequivocal proof; and, accordingly, Shakspeare, with that knowledge and judgment which so pre-eminently distinguish him, has represented Prince Henry as having been thus deluded, when he carried off the crown from the pillow of Henry IV.:

"By his gates of breath
There lies a downy feather, which stirs not.
Did he suspire, that light and weightless down
Perchance must move."

With respect to the above tests, it may be remarked, that an imperceptible current of air may agitate the light down, and thus simulate the effects of respiration; while an exhalation, totally unconnected with that function, may sully the surface of a mirror held before the mouth. On the other hand, we have learnt, from experience, that mirrors have been applied to persons in a state of mere syncope, without being in the least tarnished.

(To be continued.)

ON SUFFOCATION.—*Extracts from "Medical Jurisprudence."*

Suffocation may be defined, the destruction of life by the suspension of the functions of respiration, occasioned by external violence. Unless we add "*by external violence*," we shall perceive that the definition would be far too comprehensive; and the term *suffocation* would be made to embrace a much wider range of subjects than its popular acceptation would allow. If the physiological views be correct, which we have adopted and explained in the foregoing section, "on the Causes and Phenomena of Sudden Death," we should be compelled, without such a protecting adjunct, to include under the history of suffocation, not only the phenomena of drowning, strangling, hanging, smothering, and noxious inhalation, but even those of apoplexy, fatal intoxication, and various diseases of the brain and spinal marrow, together with the effects of a great proportion of poisons; for, by such agents, death is undoubtedly occasioned through the failure of the respiratory functions.

In death from suffocation, the heart continues to pulsate for several minutes after the breathing has entirely ceased, in consequence of which the blood which passes through the pulmonary vessels no longer receives the influence of oxygen, and therefore *black* blood circulates: the brain, it would appear, soon feels the want of the florid arterial stream, by which alone its energies can be maintained. Bichat has shown that, when dark-coloured blood is injected into the vessels of the brain, by means of a syringe connected with the carotid artery, the functions of the brain become immediately disturbed, and in a short time entirely cease: the effect is precisely similar, whether the dark-coloured blood be transmitted to the brain by the syringe of the experimentalist, or by the heart itself. It is not until after the full effects of the suspended respiration are thus produced on the brain, that the motions of the heart become enfeebled, and that the ventricles contract less powerfully and at longer intervals: at length, the action of the heart is altogether arrested, and, if the thorax be examined at the in-

stant that the circulation has ceased, nothing is observed except a slight tremulous motion of the auricles. The cavities of the left side are much contracted, and contain only a small quantity of blood; while the right auricle and ventricle, and the large vessels communicating with them, are distended to an unusual size. This state of the heart, it will be observed, is very different from that which we have described as constantly occurring after syncope. In the contemplation of these phenomena, a question very naturally suggests itself in regard to the probable interval which elapses between the cessation of respiration and the consequent failure of the heart's action: in other words, it may be asked, how long can the heart support its contractions without the aid of respiration? It would appear that this interval not only varies in duration in different animals, but even in the same animal under different circumstances—such as that of age, capacity of the thorax, quantity of air in the lungs, state of the stomach, and general vigour of the animal; but in man, under the most favourable circumstances, it is extremely doubtful whether the heart ever continues to pulsate for so long a period as five minutes, after the lungs have ceased to perform their office; and it is very questionable whether, in most instances, the interval is not considirably shorter than this.

1. *By Drowning.*—It was formerly believed that asphyxia from drowning always depended upon the lungs and intestinal canal being filled with water; whereas, it is hardly necessary to observe that it alone depends upon the blood, in consequence of the suspension of breathing, ceasing to possess the qualities which are essential to the preservation of life. M. Gauteron immersed a dog for more than a quarter of an hour without inflicting the least injury, having previously inserted a long tube in the trachea, which was kept elevated, during the experiment, above the surface of the water.

If a small animal be immersed in water, contained in a transparent glass vessel, the phenomena of drowning are readily discernible. There is first a deep expiration, by which bubbles of air are expelled from the lungs; there is then an effort to respire, but the effort is ineffectual; there being no air which can be received into the lungs, and a spasm of the muscles of the glottis seems to forbid the admission of any considerable quantity of water into the trachea. The attempts to breathe are repeated several times, and at each attempt at expiration a small proportion of air is expelled from the mouth and nostrils, until the air-cells of the lungs are almost emptied; then the animal becomes insensible, and convulsive action of the voluntary muscles mark the instant when the brain begins to suffer from the influx of the dark-coloured venous blood. After the cessation of these convulsive actions, the animal becomes motionless, and gives no sign of life; but, if the hand be applied to the thorax, the actions of the heart, gradually becoming fainter and fainter, indicate that some remains of vitality still linger in the system. Before the circulation of the blood altogether ceases, the muscles of respiration once more resume their actions, and ineffectual efforts are made to breathe. It is a remarkable circumstance, that the diaphragm continues to exert itself nearly as long as the heart itself, and that the interval between the cessation of the motions of the diaphragm and that of the motions of the heart,

which is so short in animals that die by strangulation, is still shorter in those who perish by drowning. These phenomena follow each other in rapid succession, and the whole scene is closed, and the living animal is converted into a lifeless corpse, incapable of recovery, in the brief space of a few moments. *(Brodie's manuscript Notes.)* If, however, the animal be taken out of the water before the total extinction of life, and the diaphragm contract afterwards, so as to draw air into the lungs before the action of the heart has ceased, the circulation is maintained, and the animal continues to respire: he will thus have escaped immediate death from suffocation; but his life still remains in jeopardy, for there is a second period of danger, and one at which death may take place when we are the least prepared to expect it; for the dark-coloured blood, which has been transmitted through the circulatory system during the suspension of respiration, would seem to act like a narcotic poison upon the brain: no sooner, therefore, does it enter that organ, but deleterious effects are produced,—the animal at first falls into a state of stupor, the pupils of the eyes become dilated, the respiration laborious, the muscles of the body convulsed, and the animal dies, *poisoned by its own blood.*

The body of a person who has died from drowning exhibits a physiognomy which it is important to notice. The whole surface is distinguished by a remarkable coldness and pallor; the eyes are half open, and their pupils considerably dilated; the tongue is pushed forward to the internal edges of the lips, and sometimes wounded; and the mouth and nostrils are covered with foam. At other times, instead of a pallid visage, we have one that is swelled, and bloated with livid blood.

Upon dissection, we shall perceive the vessels of the brain more or less gorged with blood; in the trachea a watery and bloody froth will be found; the lungs will appear expanded, full of frothy mucus, and generally livid; the right cavities of the heart gorged with blood, the left nearly empty; and it has been sometimes noticed, that the blood remains fluid, and follows after every incision by the scalpel. The stomach will generally be found to contain some water. Hebenstreit also states that, since in the act of drowning the person dies on an inspiration, the diaphragm is necessarily found convex, or bent towards the abdomen: this statement, however, is erroneous.

Upon these appearances we have a few observations to offer, especially as they have given origin to some important questions; and first with respect to the presence of water in the stomach and lungs, than which few indications, connected with the subject of drowning, have given occasion to greater controversy. For since it hath been observed that water is rarely found in the stomach or lungs of a person who has been submerged after death, it was inferred that the presence of that fluid in these organs necessarily proved that the individual must have been plunged into the water during life. As a general proposition this may be admitted as correct, although it is liable to certain exceptions, with which the medical jurist ought to be acquainted: we may, for instance, suppose a case, in which the submerged person may be so plunged at once under water, as to have been suffocated without his previously coming to the surface; and, when asphyxia has taken place, the powers of deglutition, on which the presence of water in the stomach wholly depends, are at an end; or we may suppose that the party in

question faints from terror. A remarkable instance of this kind is quoted by Foderé, from Plater, of a young woman, who, having been condemned to be drowned for infanticide, fainted at the moment she was plunged in the water, and, having remained for a quarter of an hour under the surface, recovered after being drawn out.

With respect to the presence of water in the bronchiæ and lungs, we may observe that, in the violent struggles of a drowning man, a certain portion of water generally passes the epiglottis; and, being immediately mixed with the air and mucus of the trachea, constitutes that frothy mucus which we have described as being so highly characteristic of this species of violent death; although we are not to conclude, with Larrey, that it is the immediate cause of dissolution in such cases. The quantity of water, however, thus forced into the pulmonary structure, is extremely small, for its entrance is so powerfully opposed by a spasm of the muscles of the glottis, were it to occur in any considerable quantity, and to appear in its fluid state, instead of that of froth, the inference would clearly be, that it had passed in after death.

Although the presence of this frothy matter must be considered as a strong presumptive proof that the person found in the water had perished by drowning, the converse of this proposition is by no means established by the absence of such an indication.

The buoyancy of the human body is another point in the history of drowning, which has occasioned much discussion; and in solving the problem, so highly important in its forensic relations, whether a body found in the water had been drowned, or thrown in after death, it has been considered by some physiologists as capable of affording a certain degree of presumptive evidence, although we are inclined to attach but little or no importance to such an indication. The specific gravity of the human body, under ordinary circumstances, is very little greater than that of fresh water; so small, indeed, is the difference, that, when the lungs are inflated, a man will float with little or no effort, if he have sufficient self-possession, and does not attempt to raise too great a portion of his body out of the sustaining fluid: but, when the air of the lungs is expelled, and probably at the same time a certain quantity of water is taken into the stomach, the body becomes specifically heavier, and the victim sinks. It may be assumed as a general rule, that no newly-drowned body floats, although many facts have been adduced in support of a contrary opinion. The naval custom of loading the dead bodies with weights before they were consigned to a watery grave, is not for the purpose of sinking the corpse, but for preventing its rising after the process of putrefaction has commenced. The period during which a body will remain at the bottom, cannot be very accurately determined, as the change does not take place until a sufficient quantity of air be generated to buoy it again to the surface. In the melancholy instance of the loss of the Royal George, the dead bodies were observed ascending to the surface of the sea on or about the fifth day. The general position of a body which has thus risen, provided there be no external or adventitious circumstances to change it, is such, that it floats nearly immersed, the face, arms, and legs hanging downwards, and the loins being uppermost; this is the form which the body must mechanically and hydrostatically assume, if the

sustaining power of generated air be, as it generally will, in the cavity of the abdomen, where putrefaction is more likely to commence; for the head and limbs are generally specifically heavier than water, while the trunk, especially if inflated with air, is somewhat lighter.

It has been said that a position, different from that which we have just described, will take place where the person has been strangled, and the body then thrown into the water; for, in this latter case, it is contended that the lungs will be distended with air, and that consequently, the sustaining power must be in the thorax. In support of this opinion, the story of the appearance of Caraccioli, admiral of the Neapolitan navy, has been ingeniously adduced. This unfortunate man was hanged in pursuance of the sentence of a court-martial, and his body was committed to the deep in the usual manner; thirteen days after which, while the King of Sicily was walking on the deck of Lord Nelson's ship, he suddenly exclaimed, with a yell of horror, "*Vien! Viene!*" The shot that had been attached to the feet, for the purpose of sinking it, not being sufficiently heavy.—This may, perhaps, be explained, by supposing that the corpse was stiff before it was immersed; in which case, the centre of gravity being exceedingly low, on account of the shot tied to the feet, he must have floated upright, wherever the buoyant power from generated air might be situated. At all events, we feel no hesitation in at once rejecting the proposition, in support of which it has been brought forward. The fact is, that, in relation to gaseous contents, the lungs are the same in strangled as in drowned persons; for in both cases a quantity of air is forcibly expelled from them before dissolution.

To the Editor of the Monthly Medico-Chirurgical Review and Chemico-Philosophical Magazine.

Sir,—It has often surprized me that, in the present advanced state of medical science, no papers have appeared in authenticated journals, upon the high importance of "Medical Electricity."

The rapid discoveries and improvements which have been made in this science, by our most distinguished chemists and theorists, seem to attract no notice in the medical world, intimately as the animal economy is concerned with the electric fluid. It has been proved, that it is always present in the animal frame, but sometimes in the *positive*, at other times in the *negative* state. Now any derangement of the *proper state of electricity* in the system, must be productive of uncomfortable sensations or disease, in a similar manner to other causes; to restore the *equilibrium* would be to reestablish health. The study, therefore, of this new class of diseases cannot fail to be productive of much benefit to society.

The effect of electricity upon the nervous system is certainly much more powerful than has hitherto been conjectured by those unacquainted with Galvanism; and the recent experiments of Dr. Ure, on the murderer Clydesdale, have opened the eyes of many of the heads of the profession. The wonderful effects produced by time I subjoin, in his own words:—"Experiment 2d. The left phrenic nerve was laid bare at the outer edge of the sterno thyroideus muscle, from three to four inches above the clavicle; the cutaneous incision having been made by the side of the sterno cleido-mastoideus. Since this nerve is distributed to the diaphragm, and since it communicates with the heart through the eighth pair, it was expected, by transmit-

ting the galvanic power along it, that the respiratory process would be renewed. Accordingly, a small incision having been made under the cartilage of the seventh rib, the point of the one insulating rod was brought into contact with the great head of the diaphragm, while the other point was applied to the phrenic nerve in the neck.

"This muscle, the main agent of respiration, was instantly contracted, but with less force than was expected. Satisfied, from ample experience on the living body, that more powerful effects can be produced in galvanic excitation, by leaving the extreme communicating rods in close contact with the parts to be operated on, while the electric chain or circuit is completed, by running the end of the wires along the top of the plates in the last, though of either pole, the other wire being steadily immersed in the last cell of the opposite hole, I had immediate recourse to this method. The success of it was truly wonderful. Full, nay laborious breathing, instantly commenced. The chest heaved and fell; the belly was protruded, and again collapsed, with the relaxing diaphragm. This process was continued, without interruption, as long as I continued the electric discharges.

"In the judgment of many scientific men, who witnessed the scene, this respiratory experiment was, perhaps, the most striking ever made with a philosophical apparatus.

"Let it also be remembered, that for full half-an-hour before this period, the body had been well nigh drained of its blood, and the spinal marrow severely lacerated. No pulsation could be perceived meanwhile at the heart or wrist; but it may be supposed, that, but for the evacuation of the blood, the essential stimulus of that organ, this phenomenon might also have occurred.

"In deliberating on the above galvanic experiment, we are also willing to imagine, that if, without cutting into and wounding the spinal marrow and blood-vessels in the neck, the pulmonary organs had been set a-playing at first, (as I proposed), by electrifying the phrenic nerve, (which may be done without any dangerous incision), there is a probability that *life might have been restored.*"

In diseases of the chest, dyspepsia, dyspnœa, paralysis, &c. Galvanism will be found a most powerful agent in recovery.

Astonishing as it may appear, "Medical Galvanism" has never been practised by a regular-bred scientific man, but has always been in the hands of some tyro, who has been more skilled in the art of gulling mankind than in his knowledge of the science, and has generally accompanied tonsoration with this occupation. Under such circumstances, it has only excited ridicule, and been looked upon as an old woman's nostrum. Before any beneficial result can be expected this prejudice must be removed; you would do well, therefore, to publish an account of the present knowledge and practice of medical electricity; with such cases as respectable practitioners have been able to furnish, shewing the nature of its operation. I am, Sir, with respect, your obedient servant,

May 27, 1824. GALVANICUS.

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES, &c.

ROYAL SOCIETY.—*April* 8. (*addendum*)—Sir Francis Shuckburgh, Bart. was admitted a Fellow of the Society.

April 29.—E. H. Lushington, Esq. and the Rev. Dr. E. Maltby, were admitted Fellows of the Society; and the name of Woodbine Parish, Esq. ordered to be inserted in its printed lists, he being unable

to attend for admission. Among the presents received was a portrait of Mr. Smeaton, the celebrated Engineer, bequeathed to the Society by his daughter, Mrs. Dixon.

A Letter from Dr. Tiarks to Dr. T. L. Young, For. Sec. R.S. as Secretary of the Board of Longitude, was read: it related chiefly to observations made on the longitude of various places in England in 1822 and 1823.

May 6.—Lieut. Henry Forster, R. N. was elected into the Society, and being on the eve of departure in the new expedition under Capt. Parry, was immediately admitted a Fellow.

The reading was commenced of a paper "On Univalves; by Charles Collier, Esq. Staff Surgeon:" communicated by Sir James Mac Gregor, Bart. F. R. S.

May 13.—The Earl of Orford, the Rev. Dr. Goodenough, Philip Barker Webb, Esq. and John Gage, Esq. were respectively admitted Fellows of the Society.

The reading of Mr. Collier's paper was concluded: and a paper was read, "On the Variation of the Rates of Chronometers with the Density of the Atmosphere; by George Harvey, Esq. F. R. S. E:" communicated by Davies Gilbert, Esq. V.P.R.S.

May 20.—The Rev. Baden Powell was admitted a Fellow of the Society.

A Letter from Professor Berzelius to the President was read, in which he describes the results of various chemical researches in which he has recently been engaged; and several memoirs which accompanied the letter.

The reading was commenced, of a paper "On some new Phænomena effected by Magnetic Influence, by J. H. Abrahams," of Sheffield: communicated by Mr. Tooke, F. R. S.

Geological Society.—*March* 5.—The paper entitled "Outline of the Geology of the South of Russia, by the Honourable William T. H. Fox Strangways, M. G. S." was concluded.

The term steppe is applied to vast tracts of country in the E. and S. E. of Europe. It is neither a heath, nor a moor, nor a down; *wold* would give the best idea of it in English, and it is given by the Russians to any waste land which is neither mountainous nor wooded. The Russian steppes are bounded on the W. by the Carpathian Chain of Transylvania and the Banat of Temesvar; on the S. by Mount Hæmus, the Tauric Chersonese, and Caucasus; on the E. by the Oural Mountains to beyond the Caspian Sea and the sea of Aral; vaguely to the N. by a line from the mouth of the Kama to the Dniesters on the frontiers of Podolia and Kherson. Their length is about 2000 miles, breadth 900. The soil is similar throughout; the geological structure very different.

A letter from Mrs. Maria Graham to Henry Warburton, Esq. V. P. G. S. was read, giving an account of the effects of the earthquakes which visited the coast of Chili in 1822 and 1823.

March 19, 1824.—A paper entitled "Sketch of the Geology of New South Wales and Van Diemen's Land, by the Rev. T. H. Scott," was read in part.

April 2.—The paper entitled "Sketch of the Geology of New South Wales and Van Diemen's Land, by the Rev. T. H. Scott," was concluded.

A letter was read on a section obtained in sinking a well at Streatham, by Mr. J. S. Yeats, communicated by G. H. Brown, Esq.

A letter was read from Alexander Gordon, Esq. to D. Gordon, Esq. of Abergeldie, describing three successive forests of fir imbedded in a peat moss; accompanied by specimens.

The moss of Aulguissack in Aberdeenshire, Scotland, presents an inclined plane of rather uneven surface, and varies in depth from 18 inches to 10 feet from the lower part of the hill to the river.

Upon digging up the ground, in two different parts of the moss, large roots of Scotch fir-trees were found about one foot below the ordinary average level of the moss. Below the bottoms of these roots there is a stratum of about a foot and a half of moss, below which other roots or trunks appeared, and on digging still further down (about six or seven feet below the ordinary level of the moss), a third set of roots and truncated stems of trees were discovered.

It appeared to Mr. Gordon impossible that these roots could have supported different trees, all growing at the same time, for the distinct ramifications of these (horizontally like Scotch firs at the present day) are bedded in moss perpendicularly above each other.

April 23.—A paper was read, entitled "Some Observations on the Lakes of Canada, their Shores, Communications, &c. by Lieut. Portlock, R.E."

In this memoir the author describes the various nature of the shores of Lakes Huron, Michigan, Erie, and the other lakes of Canada, and annexes a plan, in which a tabular view is presented of the comparative level of these lakes and their communications with each other. At the falls of Niagara, he observes, the upper stratum is a firm compact limestone resting on strata of a very schistose nature. It is not by erosion of the surface that the falls are made to recede, but the waters, after fall-

ing 150 feet, strike the bottom, and are reduced to foam; they are then driven up into the air far above the rock whence they had descended: this penetrating foam acts on the lower argillaceous strata, till the overhanging rock is undermined. Lieut. Portlock remarks, that there has been a gradual fall in the level of the lakes at Canada. He also offers some considerations on the proximity of the sources of several rivers which flow in opposite directions.

May 7.—A paper on the Geology of the Ponza Islands in the Mediterranean, by G. P. Scrope, Esq. M. G. S. was read in part.

A letter was read from Thomas Borfield, Esq. M. G. S. accompanied by a collection of bones and horns of the Deer, and bones of Man and other animals, found in a cleft of the rock at a quarry at Hincks' Bay, (near the Old Park iron-works) in the parish of Dawley, and county of Salop. Their adhesion, when applied to the tongue, showed that the animal gelatine was nearly gone, which does not take place till after a long period of inhumation.

Meteorological Society.—*Feb.* 11.—Dr. Burney communicated the results of a Meteorological Journal, for January 1824, kept at his observatory at Gosport, Hants.

A note was read, on some curious effects of the Radiation of Heat; by Luke Howard, Esq. F. R. S. and M. Met. Soc.

The reading was commenced of a "Memoir on the Variations of the Reflective, Refractive, and Dispersive Powers of the Atmosphere, &c.; by T. Forster, M. B. F. L. S. and M. Met. Soc."

March 10.—The reading of Dr. Forster's memoir was concluded. It relates to certain branches of the subject of atmospheric refraction, belonging to the province of meteorology, which the author states to have been particularly neglected: these are, the variation in the refractive, dispersive, and reflective powers of the atmosphere, resulting from the diffusion therein of different modifications of cloud, which are themselves affected by local circumstances, and which vary greatly at different times; and the effects of that variation, on the colour of the light transmitted by the planets and fixed stars, and on the declination of the latter.

A paper by Dr. Forster was also read, "On the great Depression of Temperature which occurred in January, 1820."

The remarkable depression of temperature, related in this paper, took place at Hartfield, in Sussex, to the neighbourhood of which place it appeared to be confined, during the period between sun-set on January 14, and midnight of January 15, 1820.

Dr. Burney communicated the Results of his Meteorological Journal, for February.

April 14.—A note was read on certain Phænomena of the late Cold Weather, &c.; by Luke Howard, Esq. F. R. S. M. Met. Soc.; and Dr. Burney communicated the Results of his Journal for March.

May 12.—Dr. Burney communicated the Results of his Journal for April; and a paper was read, giving "an Account of the principal Phænomena of Igneous Meteors which were observed in the Year 1823; forming part of a Review of the Progress of Meteorological Science during that Period; with Remarks on the Characters of certain Meteorites. By E. W. Brayley, Jun., A. L. S. and M. Met. Soc."

The Society then adjourned, over the Summer recess, to meet again on Wednesday, the 13th of October next.

Medical Society of London.—The fifty-first Anniversary Meeting of this Society was holden at the London Coffee-house, Ludgate-hill, William Shearman, M. D. President, in the chair.

The officers and council for the ensuing year are as follow: *President;* William Shearman, M. D.—*Vice-Presidents;* Henry Clutterbuck, M. D.; Henry James Cholmely, M. D.; Sir Astley Paston Cooper, Bart. F. R. S., and Thomas Callaway, Esq.—*Treasurer;* John Andree, Esq.—*Librarian;* David Uwins, M. D.—*Secretaries;* T. J. Pettigrew, Esq. and Thomas Callaway, Esq.—*Secretary for Foreign Correspondence;* Robley Dunglison, M. D.—The other members of the Council: Drs. Walshman, Hancock, J. G. Smith, Blicke, Blegborough, Hopkinson, Stewart, Ley, Darling, Haslam, Pierce, Cox, and Burne; Messrs. Sutcliffe, Drysdale, Wender, K. Johnson, Dunlap, Kingdon, Ward, Thomas Clarke, Burton, Brown, Lake, Ashwell, Edwards, Handey, E. Leese, Skair, Cordell, Bell, Ellerby, Amesbury, T. Bryant, and Burrows.—*Registrar;* James Field, Esq.—The Fellow elected to deliver the annual oration, in March 1825, Eusebius Arthur Lloyd, Esq.

The President informed the meeting, that the time allotted for the perusal of the dissertations offered for the Fothergillian medal, during the last year, having been unexpectedly shortened, the Society had not yet adjudicated the prize medal: this however would be done forthwith, and the medal would be presented to the successful candidate at a Special General Meeting of the Society, to be holden on the 3d of May, at eight o'clock in the evening.

The annual oration was then delivered by Dr. John Gordon Smith, the Ex-Vice President; the subject was, "The Duties

and Perplexities of Medical Men as professional Witnesses in Courts of Justice."

A numerous body of Fellows and their friends, amounting in all to 86, afterwards dined together in the great room of the tavern, the President being in the chair; and the remainder of the day was marked by harmony and conviviality.

Conditions of the Fothergillian Medal.—In conformity with the will of the late Anthony Fothergill, M. D. F. R. S., the Society resolved to give, annually, to the author of the best Essay on a subject proposed by them, a gold medal, value 20 guineas, called the Fothergillian Medal; for which the learned of all countries are invited as candidates.

1. Each dissertation must be delivered to the Registrar, in the Latin or English language, on or before the first day of December.

2. With each dissertation must be delivered a sealed packet, with some motto or device on the outside, and within the author's name and designation, that the Society may know how to address the successful candidate.

3. No paper in the hand-writing of the author will be received: and if the author of any paper shall either directly or indirectly discover himself to the Committee of papers, or to any member thereof, such paper will be excluded from all competition for the medal.

4. All the dissertations, the successful one excepted, will, if desired, be returned with the sealed packets unopened.

5. The Prize Medal will be presented to the successful candidate, or his representative, at the Anniversary Meeting of the Society in March 1825.

The subject of the Dissertation to be offered for the Prize Medal for March 1825, is, "The Pathology and Treatment of Periodical Asthma."

Report of the Diseases of Birmingham, from October 3, 1823, to January 3, 1824. By John Darwell, M. D. accompanied with Pathological Remarks, &c.

Acute Diseases.—Mania Puerperalis 1—Ophthalmia 4—Dentitio 9—Odontalgia 1—Aphthæ 2—Cynanche Tonsillaris 6—Cynanche Trachealis 1—Cephalalgia 21—Pleuritis 2—Catarrhus 8—Melæna 1—Colica 1—Cholera 3—Peritonitis 1—Diarrhœa 10—Obstipatio 49—Splenitis 1—Nephritis 1—Febris Infantum 8—Synochus 14—Typhus 10—Arthritis Rheumatica 12—Rheumatismus A. 6—Variola 9—Rubeola 1—Urticaria 5—Erysipelas Faciei 8—Abscessus 1—Paronychia 1—Phlegmatia Dolens 1.

Chronic Diseases.—Hemiplegia 5—Paraplegia 2—Epilepsia 3—Paralysis Partialis 1—Hypochondriasis 1—Chorea 2—Ranula 1—Surditas 1—Cynanche Trachealis C. 1—Hæmoptysis 3—Phth. Pulmonalis 31—Hydrothorax 2—Dyspnœa 1—Asthma 42—Tussis 10—Bronchitis C. 19—Morbus Cæruleus 1—Mastodynia 1—Dyspepsia 119—Asthenia 15—Gastrodynia 7—Hæmatemesis 3—Dysenteria 1—Ascites 3—Peritonitis C. 1—Lumbrici 4—Tænia 1—Hæmorrhoides 3—Marasmus 12—Hepatitis C. 9—Icterus 10—Dysuria 4—Nephralgia 2—Hæmaturia 1—Leucorrhœa 4—Hydrops Ovarii 1—Amenorrhœa 5—Menorrhagia 10—Dysmenorrhœa 2—Hysteralgia 1—Hernia Pudendi 1—Rheumatismus C. 27—Lumbago 5—Ischiatica 1—Tumor ab Hydrargyro 2—Exostosis 1—Nævus 1—Porrigo 3—Strophulus 1—Acne 3—Impetigo 4—Lepra 3—Struma 2—Anasarca 3—Hydrops totius Corporis 5—Carcinoma Uteri et Nympharum 3—Luxatio 2—Total 610.

The number of patients in the last three months has been much greater, as might have been expected, than in the preceding quarter; but the increase has arisen, rather from the aggravation of such diseases as are general through the whole year, than from much addition to those which are more frequent in winter. Still there has been some augmentation in the latter, which will be readily seen by comparing the present table with the last. More patients have presented themselves with rheumatic and pulmonary affections than during July, August, and September; but the increase principally consists in disorders of the alimentary canal, none of which, however, have been very severe. Nevertheless, the afflux of patients has not altogether been so numerous as in the corresponding quarter for the last three years; and inquiry among the most respectable practitioners has led to a similar conclusion with regard to the higher classes. Probably this is to be considered as the natural consequence of so severe a winter as that of 1822 and 1823; by which all the oldest and the feeblest of the younger patients would be cut off, who must always form

the great bulk both in private practice and in the practice of a public institution. The weather, during the last quarter, though variable and frequently rainy, has been generally mild, and, with the exception of two or three days in December, we have as yet experienced little cold.

Twenty-one cases of acute headache appear in the present list, most of which required general and local depletion; the former without the latter was rarely successful, while the latter alone was frequently sufficient. Perhaps local blood-letting might be oftener serviceable, if employed more liberally. The usual plan of applying five or six leeches, can scarcely be expected to be advantageous; nor is it at all surprising, that they who are addicted to this practice should have little confidence in its success. The French, who are commonly blamed for inefficient practice, may too seldom, perhaps, have recourse to general blood-letting; but it may be much questioned, whether British practitioners would not considerably modify their propensity for large general depletion, were they in the habit of ordering fifteen or twenty, instead of five or six leeches at a time. It is quite certain, that many individuals will bear blood taken from them in this manner, nay, will be materially benefited by it, who could not sustain half the quantity drawn by venesection without a serious diminution of their strength. These remarks hold equally good, if cupping be practised; for it is notorious, that the way in which this operation is usually performed, makes it perfectly inefficient and useless.

The instance of chronic croup seems to have originated with, and to have been aggravated by, the employment of the individual. He was a milkman, and necessarily much exposed to the vicissitude of the weather. The complaint commenced twelve months before I saw him, and, with slight temporary intermissions, had continued till that time. His state was peculiarly distressing; great dyspnœa preventing his taking more than a few steps together. Hoarseness and a loud croupy noise. Some tenderness on pressing the trachea. He appeared to be in danger of almost instant suffocation. Small doses of tartrate of antimony and calomel, with tartar emetic ointment rubbed externally, so as to produce a very full crop of pustules, gave very considerable relief; and under the use of this, and afterwards blue pill, with decoction of sarsaparilla, he has lost all his complaint, except a slight hoarseness, and has returned to his employment, &c.

HOSPITAL REPORTS.

April 26.—At the conclusion of this evening's lecture, Sir Astley Cooper again adverted to the subject relative to the observations made the preceding lecture night; with a view of explaining away any misconception of ideas that might have got afloat as regarded his own sentiments in the mercurial treatment in syphilis: for this purpose, Sir Astley took out of his pocket the paper now before us, and read to the following effect:—

"Gentlemen,—I shall detain you a few minutes longer upon my own affairs and those of my colleagues.—Their feelings have been hurt by my observations on the abuse of mercury in our hospitals—but the observations to which I now allude, having been made for many years in these lectures, were certainly not at all applicable to them.

"Who are these men, that I should be disposed to injure them? Mr. Travers was my apprentice, Mr. Green is my godson—Mr. Tyrell is my nephew, Mr. Key is also my nephew, and Mr. Morgan was my apprentice. I feel proud in having them around me, because I believe that at no former period was the surgical department of the hospital better filled than at the present moment by them. No, gentlemen—it is FAULTY DOCTRINES which I attack, and NOT INDIVIDUALS!!! It is the science of my profession I wish to uphold; and it is equally my wish, that the abuses of that profession should be corrected!!!

"I believe that much good has arisen from my observations on the abuse of mercury; it is not, therefore, my intention to

retract my opinions on this subject: and I am happy in being able to state, that the present surgeons of St. Thomas's and Guy's hospitals, who were my pupils, have never pursued the plan of treatment in syphilis and gonorrhœa which I have deprecated—also, that the venereal wards of these hospitals are about to be opened under new and improved regulations.

"I trust that the harmony and union which have hitherto subsisted between the surgeons of St. Thomas' and Guy's hospitals will long continue to exist, for the public good and their own mutual advantage—at least, it shall not be my fault if ever they be destroyed."

On the abuse of mercury in syphilis, &c. Sir Astley Cooper is not the only modern surgeon who has long been of the same opinion. Le Roux, one of the surgeons of la Charité, at Paris, has delivered, in his "Narrative of a Journey to London, in 1814," his opinions on this subject, with equal freedom and propriety, which are partly to the following effect:—

"Let it not be said here only, on account of the fact we have just reported," (when speaking of the mercurial treatment of syphilitic ulcers, &c.) "without regarding the fact itself, that the English physicians and surgeons are, I believe, far behind us with respect to venereal complaints, and particularly consecutive venereal affections. They were, for a long time, in the right way with what regards this disease; and now give themselves up to the most obscure theories; they think themselves to be in a fair way of making important discoveries, and plunge themselves into crooked paths, to which I can perceive no ending. I wished to have been able to have given the views of some of them, particularly on what is called *pseudo-syphilis*; I had undertaken the task, but have now renounced it. They, themselves, allow that these ideas are not yet established; they, themselves, feel the necessity of appealing to experience. I shall only say, that what they think they are able to demonstrate, or, that a number of the diseases contracted in the venereal act, and which are believed to be syphilitic, are simply *venereal* and not *syphilitic*; that is, that there are symptoms apparently syphilitic, which are really not so, but are often the consequence of the untimely (and profuse) abuse of mercury; that, in fact, ulcers, or other local affections, whether scrophulous, scorbutic, or produced by any disease of the habit, or by any other modification of the *system*, make their appearance very frequently in persons who have been tainted by the syphilitic infection, and assume the physiognomy of the symptoms which this virus gives rise to, in such a manner that they are mistaken for a chronic or constitutional syphilis."

The French have always been extremely tenacious in pushing mercury to too great an extent. It was the practice, and for any thing we know, is still, at Valenciennes, where there is a large and well-conducted military hospital, to send all the recent cases of venereal infection to Lisle, a distance of about 36 English miles, for the purpose of salivation. The secondary cases only were taken in at the former, where mercury was never carried to the extent of salivation at all; upon the supposition that the soil here was favourable to the restoration of patients whom it was necessary to carry this mildly to a certain extent. And in both these hospitals it was, as far back as we can recollect (1805), a common practice to cure chancres by the mere keeping up of a mercurial action in the system, without producing any discharge whatever from the salivary glands.—In fact, lues, in general, was treated upon the same principles; and this practice we have ourselves been much in the habit of adopting, on numerous similar occasions, without having ever witnessed any untoward results. Indeed, we have reason to apprehend, that, in many constitutions which resist a considerable quantity of it, the apparent influence of mercury is not at all essential to the cure of the disease.

BIRTH.—May 10th, in Judd-street, Brunswick-square, the lady of Alexander Delisser, Esq. Surgeon, of a son.

MARRIED.—On the 26th April, at Tenterden, Kent, by the Rev. Thomas Wood, T. M. Hammond, Esq. of Brixton, Surry, Surgeon, to the daughter of the late John Neve, Esq. of Tenterden.

On the 1st ult. at St. Luke's, Chelsea, Dr. Veitch, to Mary, widow of the late Capt. Jermy, R. N. and only daughter of John Keith, Esq. of Ashover, Derbyshire

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Obituary.

On the 9th ult. Mrs. Hill, wife of Dr. Hill, in London-street, Fitzroy-square.

"With much regret we have to state the premature death of Mr. Sheckton, Demonstrator of Anatomy to the Royal College of Surgeons, on Monday, the 24th ult., whilst engaged in delivering a lecture. Raising a knife at the same time, he slightly cut his finger, which was thus inoculated with virulent matter from the subject upon which he lectured. Inflammation suddenly came on, and after every remedy was tried in vain, he expired on Friday morning."—*Dublin Patriot.*

On the 3d (15th) of April, at St. Petersburgh, Dr. Charles Simpson, aged 28.

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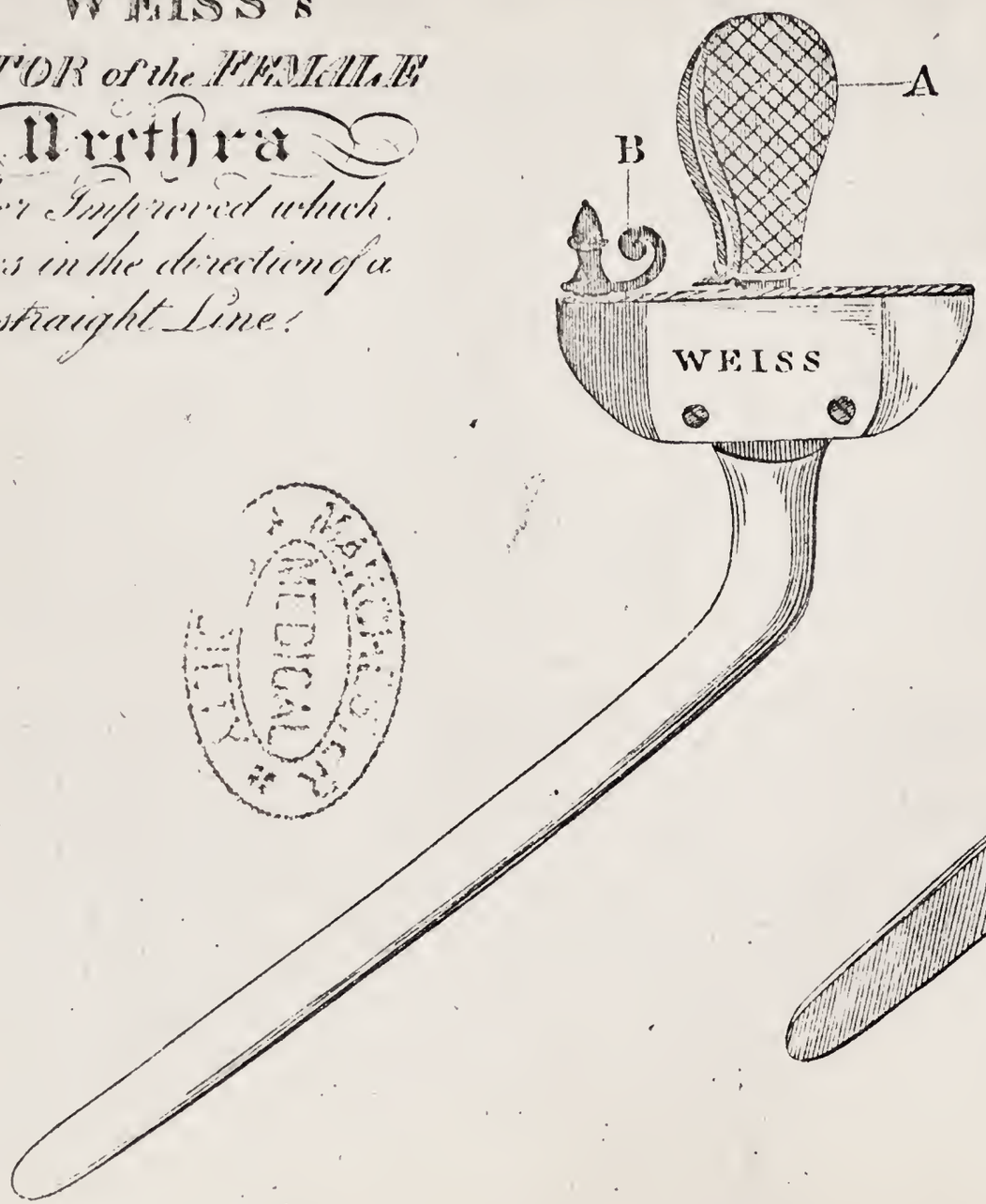
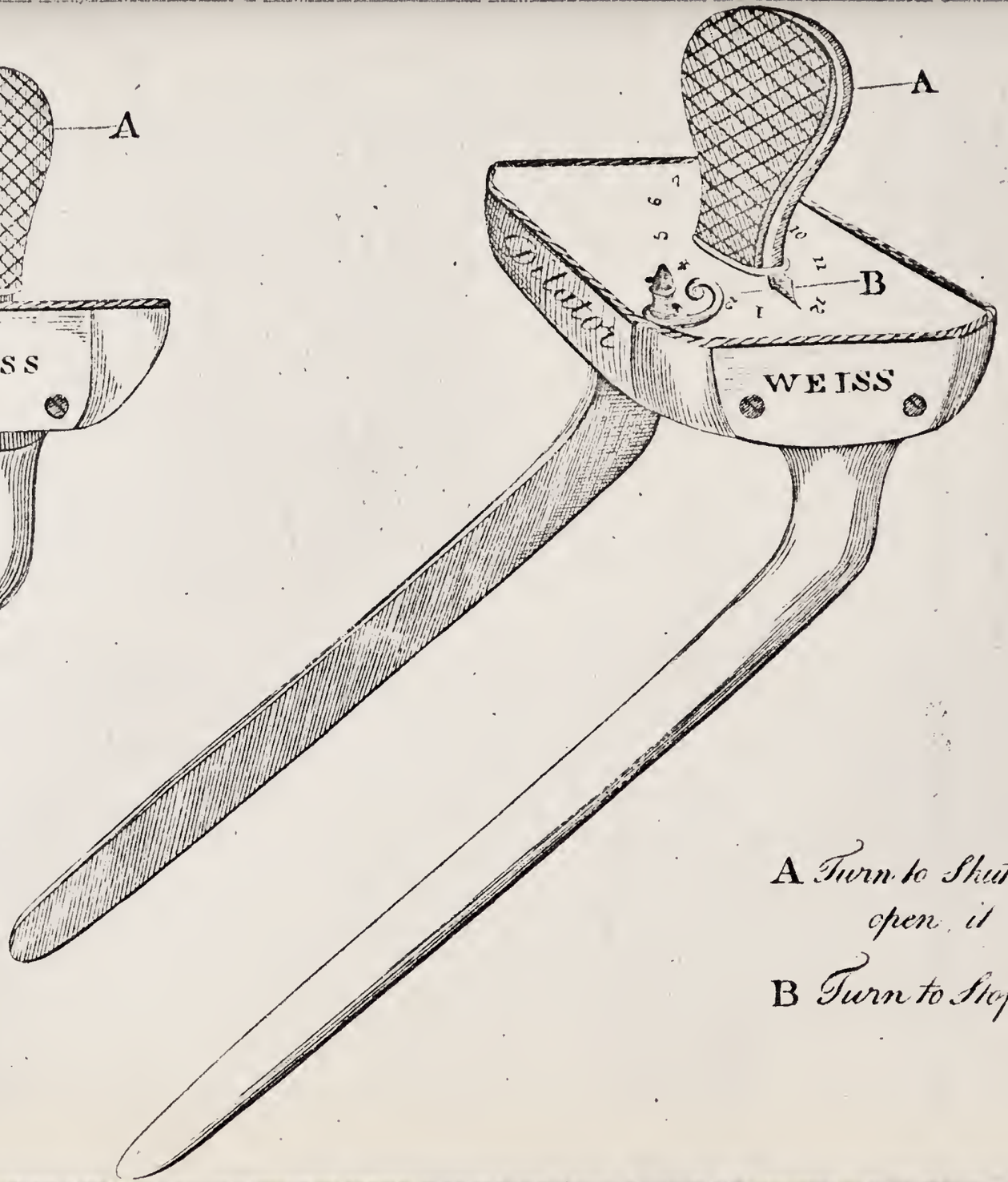




A *Turn to Shut or open it*

B *Turn to Stop it*

THE MONTHLY

Medico-Chirurgical Review and Chemico-Philosophical MAGAZINE.

No. 5.] JULY 10, 1824. [New Series.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

ANALYSIS OF MEDICAL JOURNALS, &c.

London Medical and Physical Journal, (July.)

This Journal, extremely monotonous at all times, is this month *full of nothing*, unless a tiresome abstract rhodomontade can be called *something*, termed by its very *docte* and pompous editors "Historical Retrospect;" i. e. long, dry, and quaint repetitions and palaverings, on topics that have already *strutted* and *fretted* their hour in every Medical Journal of the metropolis, without having contributed much to the information or instruction of the profession, either in a pathological, or physiological point of view. That our readers, however, may not imagine we are disposed to treat laborious industry with less than its due meed of attention, we can do no less than recapitulate with "Messieurs les Docteurs," the various subjects which have occupied their conjoint or respective, and retrospective considerations, for the month of July; and refer them to our own columns, from time to time, for the particular history of them.

1st. Anatomy (Natural) and Physiology.—The learned editors under this head complain bitterly, and we think somewhat unjustly, of the barrenness of anatomical discoveries. As exceptions, however, to this general barrenness, we are, nevertheless, presented with another edition of Dr. Horner's (of Pennsylvania) new muscle in the eye; an account of which is given by himself, in a work recently published, entitled "*Lessons in Practical Anatomy, for the use of Dissectors,*" and from which, an account of this "New Muscle" was soon afterwards extracted, and *bandied* about in every journal in Europe. To be equally brief as explicit,

"This new muscle is about three lines broad, and six lines long, arising from the posterior flat surface of the os unguis, near its junction with the os ethmoides, and passes forwards and outwards, lying on the posterior face of the lachrymal ducts. As it approaches the commissure of the lids, it splits into two parts, nearly equal, each of which is appropriated to a duct, and inserted along its course, almost to the punctum lachrymale."

We are told by professor Horner, that in order to get a distinct view of this muscle, the eyelids must be separated from the eye, and turned over the nose, leaving the tendinous attachment of the orbicularis and ciliaris muscles. The valvula semilunaris is brought into sight by this process, which must be dissected away, and also the fat and cellular membrane underneath it. The muscle is now seen; and, by passing bristles through the lachrymal ducts, its connection with them is rendered evident; at the same time, we get a good idea of its size, origin, and insertion. *Its use*, as might be anticipated, is to regulate, in some measure, the lachrymal passages, and securing the course of the tears.

In fact, it is to the lachrymal ducts, what a *flood-gate* is to a canal, &c.

2ndly. Dr. Ribes, on the minute anatomy of the ear, is re-echoed. This gentleman, in some of his dissections, thought he discovered a thin watery fluid, lubricating the lining membrane of the labyrinth of the ear. He found this fluid, in deaf people, of different colours, "sometimes yellowish, sometimes of a red and *bloody* tinge, &c.

"He dissected the ears of oxen and horses recently slaughtered, to estimate the quantity of fluid within the labyrinth, and repeated the experiment of Cotunnus, of freezing the ear. He always found fluid, as well as a considerable space that was empty, &c. In this manner he went on hunting and searching, calling aqueducts what our own anatomists long ago called "*canals for the passage of vessels,*" a conclusion to which he at length comes, after all his labour, by mutation of words, though not of sense or meaning; although it all amounts to the same thing in the end, like an old woman's story.

Quere. *Is not a canal or channel that admits of a passage for vessels, an aqueduct? Is not an aqueduct, that admits of no passage for vessels, a canal or channel?* Solve this, ye *learned doctors*, and no longer bother your thick heads about subjects far excluded from human penetration, and which, like painted butterflies, though they may divert you in the pursuit, must infallibly perish in the grasp!

3dly. Comes Dr. Weber again, *(Journal für chirurgie und Augenheilkunde)* on the "mutual relation between the developement of the head and the pelvis," viz. that the various forms of the head, which are pointed out as characterizing different varieties of mankind, are to be found among all nations, one or other being more or less common among particular races. "The principal forms of the head, according to Weber, are the natural, the round, the pyramidal, the oblique, and the square. This division holds good with regard to the pelvis, that being considered as the natural, which is most regular, and most generally found."—

Now, as Dr. Weber asserts that the pelvis always presents the same characters with the head, and this not only in the same nation, but in each individual taken separately, whatever may be the sex, age, or the diseases which may have influenced the conformation of the skeleton, "in short, in any individual, who has, for example, an oblique head, the pelvis will be formed equally oblique; *and the same relation will be found to exist between their size and proportion;*" we would beg leave to ask, *en passant*, whether the learned *pelviologist* has, in the course of his *analogy*, compared the head with the stern of the generality of Dutchmen? What a monster, forsooth, *Mynheer* would actually be, even in a comparative point of view, did affinities of this nature exist.

No one will presume to negative human symmetry on a wide basis, but when *extremes* are about to be connected in this manner, as well might we look for the same harmony in a tadpole. Admit the comparative doctrine of *Sterni* or *Pelviology*, and a *fundamental* blow would soon be levelled at our favourite craniology. Mr. Deville's collection of heads and tails, partitioned out on the same scale, would be a fresh source of admiration, and give a new zest to the believers in innate ideas—the *bumpists* probably might take the alarm; their system might be shaken or cemented by any extraordinary projection of the os sacrum, which might be found, in some measure, if not

entirely, to correspond with the animal faculties, or intellectual qualities of the individual; or, what is more probable, like the body without the members, the craniologists, might find it their interest to lay their heads together with the pelviologists; thus forming a union of sentiment that might tend to multiply their proselytes, and strengthen their claim to innerity; against which, nothing short of the grossest scepticism and ignorance could hereafter raise its voice.

4thly. From the pelvis, we are now, in regular *retrospective* order, directed to the genitals.

"Turning from man to the lower animals, we find rather more to attract our notice, the field being more extensive, and consequently not quite so minutely examined. Some anatomical facts have been detailed respecting the genital systems of some species, which may prove not uninteresting in a physiological point of view."

This subject relates to Dr. Gärtner's discoveries of a glandular organ in the uterus of some of the lower animals. He was engaged in examining the lymphatics in the uterus of a cow, when he accidentally observed a duct, or canal, filled with a yellowish fluid, which, from appearance, he was satisfied, could neither be an absorbent nor a blood vessel. Traces of it could be followed to within an inch of the ovary, and downwards to an opening, by which it ended, close to the orifice of the urethra. His next examination was the uterus of a sow, three years old, where he found something else, in the shape of a hard cylindrical body, upon the side of the vagina next the bladder, which he opened and found to be a single canal, which he dissected upwards for some inches; when, by degrees, it divided into branches, which ran into a glandular body, bearing a considerable resemblance to the pancreas; about two inches farther on, it became a single canal, of very small diameter, which stretched on to the uterus. He injected quicksilver into this duct, and found that the mercury came out into the vagina, by a small aperture, just beneath the opening of the urethra. These observations Dr. Gärtner afterwards confirmed by reiterated experiments.

5thly. M. Geoffroy St. Hilaire's remarks on the generative system of the ornithorhynchus, which comprehends the two systems proper to birds and the mamalia; an examination which led him to discover the nature and arrangement of the three passages which serve in birds for the abdominal discharge.

Passing over some other unimportant observations of a retrospective nature, as well as "the physiological department," which is equally without interest, inasmuch as it contains nothing more than individual gossip and chit chat on the French experimentalists, without a particle of elucidation or contradiction, we fall in at length with

Our countryman, Dr. Edwards, who has become naturalized in France, and whose name we have frequently had occasion to mention with respect, has lately published an extensive work upon the *influence of physical agents upon animal bodies*, by which appellation he designates the air, water, temperature, light, and electricity. (*De l'influence des agens Physiques sur la vie. Par W. F. Edwards, D. M. Paris*, 1824.) Dr. E. has made some very ingenio-cruel experiments, in illustration of the influence of cutaneous respiration, &c., which, under a practical point of view, go just as far to aid and assist us, as a knowledge of the "*ramusculi ramusculorum*," would do when called upon to perform any trivial or important operation.

Morbid Anatomy and Pathology.—Under this head, we have an analysis of Dr. Duncan's case of bifid brain, an account of which is given in the Edinburgh Medico-Chirurgical Transactions; and subsequently in our own and other Journals, as well as in M. Bayle's

relation *(Revue Medicale)* of some cases of disease in different parts of the *Brain* and *Spinal Marrow.*—Dr. Abercrombie's cases of diseases of the Heart, *(Ed. Med. Chirurg. Transac.)* with a few interludes of minor importance.—Scudamore on the Blood—Gaspard on Putrid Diseases—Dr. Combe's case of a disease which he terms Œnemia, &c. &c.

MEDICINE (including THERAPEUTICS *and* MATERIA MEDICA.)—Nothing new or interesting here, beyond what has already been made known to the profession, as usual, through various channels.

SURGERY.—Here we have Dr. Syme's case of amputation at the hip-joint, given six months back, in the EDINBURGH MEDICAL AND SURGICAL JOURNAL; after which, comes a very invidious and half-sneering remark, on which the preceding reflections have also an oblique bearing, which cannot be misunderstood, relative to the case of amputation at *the hip-joint, (see our last number, with a plate; as well as an account of the operation, at the time it was performed,* (also Old Series,) lately performed at Guy's Hospital.

"But" say the *retrospects*, "we have no particulars of that operation upon which we can rely; and, therefore, we shall wait the publication of the case itself."

Quere. *Why couldn't the Gentlemen have made a case of it, or fabricated some particulars about it? Is it not well known to the world, that they are not at all abashed at doing things of this kind, upon a pinch?*—

Under this head, (Surgery,) we are served up with another true and particular account of each of the following operations, viz. of LALLEMAND'S case of excision of the *lower jaw, and* ROUX'S *fungous tumor of the upper lip*,—an operation at the shoulder-joint by Lisfranc. Magendie's opinions with regard to the functions of certain nerves; all of which are occurrences of very long standing, detail and retail. In fact "THE LONDON MEDICAL AND PHYSICAL JOURNAL" is as neat a piece of antique patch-work as we could ever wish to see spread out before a gaping multitude, who neither read nor think for themselves.

LONDON MEDICAL REPOSITORY, (July.)

Art. I.—*Of Madeira, its Visitors, its Climate, and its Diseases.* By C. Heineker, M. D.

This is a very excellent article, written with much freedom, and contains so many relevant observations on the subjects it advances, that we do not hesitate to recommend it to the perusal of all, medical or non-medical, visitors, who may have it in contemplation to go to Madeira, either with a view to health, practice, or to commercial interests. Dr. H. remarks,

"That the climate of Madeira is the best certainly within this hemisphere, I take for granted; but I am *more than doubtful* as to the *season* which is most beneficial in pulmonary disease. I have myself hitherto always progressed during the summer, and (in an inferior ratio, fortunately) retrograded during the winter. Could I enjoy for a few years a perpetual Madeira summer, I should sanguinely anticipate the most beneficial effects; and if it could be accomplished with convenience, or rather without very detrimental sacrifice, I would try myself, and strongly recommend to others, the experiment of spending their summers here, and winters in the most temperate and healthy of the West-India islands. To a person in health we have no winter; but there is one, although mild, to the invalid, and the utmost he ought to expect is to be no worse at its termination than he was at its commencement; in lieu of which, he has been led to suppose that this is the season for his re-establishment, and that to brave the summer would be next to insanity.

"In speaking of himself, every one must be egoistical—I have already been sufficiently so; but as example is far before precept, I may add, that during the *summer* I visited every part within a day's ride to the east, west, and centre of the island—was frequently on a mule from four to eight

hours daily—ate freely of animal food—drank moderately of beer—ascended to heights of from three to nearly six thousand feet above the level of the sea, and took many other almost imprudent liberties, not only without suffering, but with *manifest improvement* and *advantage*. I gained flesh and strength—had very little cough—felt a general buoyancy and elasticity, to which I had long been a stranger—expectorated a mere apology for an increased mucous secretion during the night, upon first awaking, and possessed a freedom and expansive power in the chest and lungs, which had long been wanting. I am now in winter-quarters—the cough and expectoration have increased—the sensation of *hæret lateri* has returned—there is a want of tone in the whole system—it is now necessary to attend to dietetics—like a hibernating animal, I am living upon my own resources—but, Heaven granting that I vegetate on for a few months, without too great an exhaustion of sap and stamina, the returning summer will lure me forth into my butterfly existence, and I shall then be assiduous in laying-up a good stock for winter consumption.

"During a sirocco, which never occurs more than twice or thrice annually, and then only for three days, the thermometer will sometimes exceed 90° in the shade; at other periods it rarely ranges above 80° and in consequence of the great uniformity of temperature, the purity (if there are relative degrees) and lightness of the atmosphere, the absence of all smoke and dust, and the never-failing land or sea-breezes, the heat is never so oppressive here as in England—close sultry days are almost unknown—a fog never occurs.

"The *summer* generally commences in June, and continues without interruption until the end of September, with an almost constant prevalence of north-easterly winds—the fag-end of the trades, and as similar to English north-easters as Zephyrus to Boreas. Late in September, or early in October, we look for the autumnal rains, which come from the west and south-west, and terminate in the course of November, in clear, mild, open weather (our *second* or St. Martinbo's summer). This usually lasts until Christmas. North-west winds, with snow upon the summits of the mountains, and rain in the town, continue more or less throughout January and February; and it is then, and only then, that the weather is at all winterly. There is a raw dampness and chilliness at this time, which reminds you, morning and evening, that a small snug fire would not be amiss, just to look at occasionally: it does not amount to cold; indeed, the thermometer at sun-rise never falls lower than 50°, but it precisely meets the term "uncomfortable;" it does not confine you to the house, but it makes you prefer it four days out of fourteen. One winter with the other, the average number of days in each on which I have been prevented by weather from attending to professional avocations or taking a ride, would probably equal ten or fifteen. March is more or less a windy month, and April and May showery; so much so, that "*Março ventoso, e Abrilo chovoso, fazem hum anno famoso*," is as common an adage as "March winds and April showers," &c. &c., used to be in our boyish days. The most trying seasons for invalids are here, as all the world over, I believe, the autumn and spring, but especially the latter: and for this plain reason, that the *diurnal* variation of temperature is then greatest."

Dr. Heincker thinks, that "slight passive hœmoptoë occurs more frequently in Madeira than in England. Active hæmorrhage from the lungs, he has only seen one instance, and that fatal. A severe case of spasmodic asthma, was not at all benefitted by a winter residence: at a time when the expectoration was very great, and the skin parched, scurfy, free from all moisture, and in every respect unhealthy, the whole body was rubbed daily with *sweet oil;* and, during the first eight-and-forty hours, the quantity expectorated was reduced full three-fourths, and never again increased; "but," says Dr. H. "no permanent advantage was derived." Two consumptive cases terminated fatally, by effusion into the ventricles, before the disease of the lungs had completed that stage, which generally extinguishes life:—in both, the usual and immediate precursor of immediate death were absent, &c. "Two well marked examples of tubercular phthisis, terminating in ulceration, suppuration, and death; at the advanced age of fifty years and upwards."

"Of dyspeptic phthisis, which is now, I believe, becoming rather a fashionable complaint, I have not yet seen an example; but I find that most phthisical suffer-

ers are also dyspeptic. The thirteen varieties of Bronchitis have not yet reached us. It has been asserted, that no malady is more prevalent here than phthisis, with the natives of the island; but, as far as my own personal experience, and the result of my enquiries go, I incline to the contrary conclusion."

Dr. H. states, that the lower classes in the town, (Funchal) are crowded together in low small rooms (if deserving that name) on the ground-floor, (or more properly *in* the ground) with scarcely an apology for a window, or an air-hole of any description; and which they occupy in common with their dogs, cats, fowls, and other domestic animals, vermin, and all sorts "of creeping things." They are poor and filthy in the extreme, and their diet is the coarsest and most unwholesome—"gin and poor-laws, are the only two things wanting to complete their improvidence." In the *country*, the cottages are of mud, sunk into the earth or rock (a natural drip-stone) at the side of some hill, covered with thatch, and buried in vines and pumpkins; "like the body-guard of Roderick Dhu," concealed for a period from the eyes of all observers, and springing up (not at a whistle, but with the falling leaf) and peopling the face of nature as though by magic. No peasantry labour more or earn less: yams, and the sweet potatoe, are their ordinary food—even salt fish is almost a luxury in some parts: many live and die in ignorance of fresh meat being an article of human food, and have about as much idea of eating part of a child, as part of a sheep.

"No medical man resides out of the city of Funchal; but a few ignorant old wives, and about an equal number of not over-scientific barbers, are distributed up and down the island. Excepting an hospital in the city, not a public medical institution exists, and no parochial or other mode of affording assistance is provided. The roads are so bad, and the population so scattered, that a man with the philanthropy of a Howard, and the strength of a Belzoni, would be able to impart medical aid to but a small fraction of the great mass.

"The utmost that nine-tenths can hope for when sick, is to muster a *fee in kind* for a "foot-bleeding" or "herb potion" from some neighbouring shaver—to meet with two robust good-hearted friends to carry them to town in the padre's (for even here the priest does not mortify sin in the flesh *more* than his neighbours) hammock, gratis—a *doctor* there to prescribe for them *por amor de Deos*—and an apothecary to trust them till the next vintage."

"With these, and many other favourable circumstances," observes Dr. Heineker, "a more perfect hot-bed for disease (the lack of Doctors, of course, excepted,) could not, one would suppose, be contrived by human ingenuity; but fact stands here opposed to theory, and those who pass through the ordeal of infancy and childhood (in which numbers, fortunately perhaps, perish) form as fine, healthy, robust, and hardy a race, as can be produced in any part of the globe—a more peaceable, civil, enduring, and contented cannot be found.

"The prevalent complaints," continues Dr. H. (who speaks both in affirming and denying, to the best of his knowledge and belief only) "are cutaneous eruptions, in the most inveterate form; scrofula, in all its varieties, especially mesenteric; inflammations; bowel complaints; and what the Portuguese call constipaçao, or check of perspiration, which often proves fatal; some are also said to die annually of indigestion, or constipation of the bowels, at the season of gathering the chesnuts, which form no trifling article of food, as long as they last, and are very fine and abundant.—*Intermitting* and *remitting* fevers are, Dr. Heineker believes, "unknown, even by tradition."—A spasmodic case or two of *typhus*, may occasionally occur.—In 1814, scarlatina was introduced, by an American vessel, which ran its course, and has not re-appeared.

"In the summer of 1815 (on the same

authority) a ship arrived from the Cape de Verds, having on-board a man in the suppurative stage of *small-pox:* his linen was landed at a washerwoman's—her two daughters took the disease—thence it spread over the town and through the greater part of the island, and more than two thousand persons perished!—*not a case has since occurred.*"

Hooping-cough and Measles were imported in 1816: of the latter many died—they ceased on the return of the autumnal rains, and have not since been heard of—chicken-pox here and there—insanity is rare; and only one instance of stone had occurred for 40 years past. Dr. H. however, has seen "two of *Stones*," although small ones, *i. e.* from the size of a large pea downwards.—Hydrophobia has never been known or heard of.—Dr. H. has not seen a single individual case of genuine unsophisticated syphilis, or what is described as such in lectures.—Pterygium is so common, as almost to deserve the name of endemic.—Cancerous affections are numerous in proportion to other diseases, and to the population.—Bronchocele extremely rare, that it is a question whether half-a-dozen can be shewn on the whole island.—Dysentery is stated to be occasionally endemic.—Cholera has proved fatal.—Traumatic tetanus by no means unusual.—Scabies is an "heir-loom" among the lower classes; "indeed, many who ought to know better, consider that its removal would be followed by dangerous consequences, and are therefore glad to scratch on."—(*Funchal, Madeira, Jan.* 27, 1824.)

Art. II.—*Case of Recovery from a puncture Wound of the Diaphragm.* By George Wood, Esq. Newcastle-under-Lyme, Surgeon to the Staffordshire Infirmary, &c.

The patient received two wounds with a pointed instrument (a shoemaker's knife) about three inches long, which was driven into the body as far as it could be plunged. One of the wounds was on the right, the other on the left side of the epigastrium, which bled profusely—the more so, as he was obliged to walk nearly a quarter of a mile after their infliction—the right wound continued to bleed freely on the day following, and at intervals, on Sunday and Monday, with the emission of air-bubbles, resembling those produced by vinous fermentation. As the hæmorrhage subsided, considerable extravasation of blood appeared, with empysema, which gradually extended over the abdomen.

Depletive means were followed with good effect, as well as those to prevent fever and relax spasm; and the patient being a man of strong constitution and resolute mind, he recovered—the latter means were "materially arrested by the depending drain for the blood, which acted much in the same manner as the French practice of sucking the blood from the chest.

Art. III.—*On the presence of Water in the Lungs, as the Cause of Death in Drowning.* By D. Johnson, Esq. Surgeon, Torrington.

This subject has been agitated by some of the ablest men of the profession, with whom the author of this communication seems to differ; and, in support of his opinion, adduces some cases and experiments; from which he concludes, that a large quantity of water is received into the lungs of all drowned subjects, which enters during the act of struggling for life, and also after death, varying in quantity according to accidental or other circumstances, &c.

Art. IV.—*Cases in Surgery.* By Edward James Shearman, Surgeon, &c. Rotheram.

Case 1. Compound fracture of the tibia, attended with peculiar circumstances.

Case 2. From treading upon a needle, &c.

Art. V.—*Case of Cynanche Trachealis, for which Tracheotomy was performed.* By P. Hume, Esq. Surgeon, Coventry.

The patient, an adult, aged 31, recovered. Mr. Hume makes the following remarks on the subject.

"Croup is a complaint not frequently met with in adults; but there are few who have not seen it occasionally in grown-up people; and although the operation of tracheotomy is very easy, still it is one which, in private practice, causes considerable interest, consequently, it has been less practised than, perhaps, it ought to have been, as a failure might prejudice the public against the operator. I have myself seen one or two cases, and heard of others, in which I have no doubt that an operation would have been the best remedy.

"How far it may be successful upon children is questionable: it must be attended with greater difficulty in them. Mrs. Bodington was of a spare habit, and therefore a good patient to operate upon. The thyroid gland was enlarged, so that it was necessary to make the opening a little to one side of the trachea. A branch of one of the thyroid arteries was divided, and bled rather freely. The only difficulty was in cutting out a small portion of the rings of the trachea, so as to preserve a perfect opening; this was done with a pair of forceps and scissors; and the aperture was thus made so permanent that no canula was required."

REVIEW OF NEW BOOKS, &c.

ESSAY *on the* EFFECTS OF IODINE *on the* HUMAN CONSTITUTION; *with Practical Observations on its Use in the Cure of Bronchocele, Scrofula, and the Tuberculous Diseases of the Chest and Abdomen.* By W. Gairdner, M. D. 8vo. pp. 64. London, 1824.

Dr. Gairdner commences with noticing the effects of this substance on the body, when it has been given in too large doses, or when its use has been too long continued. The following case which he relates, fully illustrates this part of his subject:—

"A young English lady, at a boarding-school at Paris, had for some time been afflicted with goître. Her brother was prosecuting the study of medicine there. With the characteristic zeal of a young man, as soon as he heard of the wonderful effects of iodine, he determined on making trial of its powers on his sister. The remedy succeeded, as usual, in greatly diminishing the tumour; and, for some time, no bad effects were apparent. A small hard knot only remained in the situation which had been occupied by a considerable swelling before; and the desire to get rid of this little tumour, was the cause of the remedy having been pushed too far. Its deleterious effects first shewed themselves by gnawing pain at the upper part of the stomach, great anxiety and oppression. These symptoms were disregarded, and the remedy was persevered in for a week longer, during which time the patient became very much emaciated; she was frequently affected with vomiting, the pain of the abdomen became more frequent and more severe, and the thirst was very distressing. I was sent for early in the morning, in consequence of an alarming diarrhœa, which had come on during the night, and I found her in a deplorable condition indeed. She was then suffering the most excruciating pain at the stomach, violent cramps, and convulsive action of the muscles of the

arms, back, and legs, from which she had scarcely any intermission. The vomiting and purging were almost incessant. The dejections were bloody, slimy, and very scanty, but at first had been copious and feculent. The matter vomited was of a dark green colour, streaked with blood. The tongue was loaded with a thick crust, resembling in colour the matter vomited. The countenance was pale, contracted, and with that peculiar expression which announces abdominal suffering. The pulse was small, hard, and frequent, scarcely indeed to be numbered. The whole appearance of the patient was such as to excite well-grounded fears for her life. Being quite unable to swallow, four grains of opium were directed to be thrown into the rectum. They were not, however, long retained, and were not productive of benefit. An anodyne embrocation was therefore applied to the pit of the stomach, fomentations to the feet; and, as soon as it could be got ready, she was placed in a warm bath. This so much quieted the irritation of the stomach, that she was enabled to swallow about thirty drops of laudanum, from which there was a decided alleviation of her sufferings for nearly an hour. During ten days, she remained in a very doubtful state, subject to frequent severe attacks of diarrhœa, with intense pain of the bowels. Her emaciation, during this time, was most extraordinary. By the steady and very liberal use of opium, she recovered to a certain degree; but when I last saw her, many months after her illness, she remained subject to frequent violent spasms of the stomach, during which, opium alone gave her relief."—pp. 7, 8, 9, 10, 11.

The author next notices the anxiety and depression of spirits which it produces, when the iodine has been pushed to an over-dose; and afterwards details its effects upon the nervous and muscular systems, when incautiously exhibited.

"In certain persons, indeed, of peculiar habits of body, it cannot be exhibited so as to affect the constitution in any manner, without in some shape or other producing unpleasant nervous symptoms, such as dimness of vision, indistinct hearing, fallacious touch, insomnia, breathlessness, palpitation, and all the countless forms of inward nervous derangement. But the symptom to which we shall more peculiarly confine our attention, is a degree of tremor which generally comes on when the patient is under the full constitutional influence of iodine. This symptom may be reckoned a good gauge of the degree of nervous excitement which has taken place, and it is seldom or never absent when that excitement has proceeded to any considerable degree. It generally begins by a slight trembling of the hands, resembling that which takes place from the poison of lead; and if the medicine be incautiously continued, the larger muscles of the arms, legs, and back, become affected. When in this state, the patient can with difficulty walk, and his progression is a tottering uncertain motion. This complaint is generally attended with a hurried circulation, and a small thready pulse. There is commonly great suffering at stomach and confined bowels. When nervous affection first appears, the medicine must be most diligently watched, and if the symptoms seem to increase, its use should be instantly put a stop to."—pp. 13, 14, 15.

It is chiefly from the internal use of iodine, that these deleterious effects arise, according to the author's observation. He prefers the acetate of morphium to opium, conium, or

hyoscyamus, as an antidote to these effects, although they may be all employed for that purpose with advantage. For its influence on the muscular system, especially when costiveness prevails, gentle aperients, with exercise in the open air, are required

Dr. Gairdner next considers the effect of iodine on the absorbent system, and afterwards notices its effects in bronchocele. From this subject, he passes on to that of scrofula, and mentions two cases of this affection in which it accomplished a cure. In mesenteric disease, he thinks it has proved beneficial; but in tubercles of the lungs, he has had no satisfactory evidence that any benefit has been derived from its use.

Narrative of a Journey to London, in 1814, &c. &c.

[Continued from page 159.]

Shall I examine, (continues Monsieur Roux,) which of all these services rendered to surgery, by the English on the one hand, and the French on the other, have been the most useful? Shall I decide to which of the surgeons, whether French or English, the superiority in point of importance of discoveries is to be awarded? No. How can any one be an impartial judge in his own cause? It is some celebrated surgeon of another nation that we must ask whether our Paré has not done more than Wiseman towards the restoration of surgery; whether Cheselden or J. L. Petit are most conspicuous in the progress of surgery at the beginning of the last century? What society of able surgeons in England can be compared to that company, of which the suppression has been so prejudicial to science, the renewal of which would be a real benefit;—our ancient academy of surgery? whether there be a monument of English surgery which can be placed on a footing with the memoirs of that illustrious society; memoirs in which so many points of doctrine have been fathomed and discussed?

The author, in continuation, observes, that notwithstanding the short time the communication between the two countries had been established, the prejudices of the English practitioners against the French surgery had been strengthened by the unfaithful reports of some young English medical men, probably some of the pupils who had visited Paris.—"When I first arrived in London, they spoke to me of the bad condition of our hospitals; our surgery were considered as much inferior to the English surgery; especially in some of the Parisian hospitals, where, although I know not what is doing, I have every reason to believe that their ordinary practice deserves commendation; they asserted, on the contrary, that it was only proper to inspire disgust; and because in England the actual cautery is almost universally proscribed, while in France it is consecrated in the practice of surgery, although applied by the greatest number, and the best of surgeons, with the most rigid economy, we were represented as making the most abusive use of it, and marching always armed with red hot irons."

"What I know of the national pride of the English, which is greater, perhaps, than that of any other civilized nation, and extends from the most elevated rank to the lowest class in society; what I had heard, amongst us, of the pretensions of their surgeons to a great superiority, made me afraid of meeting from them but a cold reception. I was received, on the contrary, in a manner the most flattering and honourable. I have not only to speak in praise of those attentions which politeness requires, with those who exercise the same profession, and whose names may be more or less known, attentions of which we Frenchmen are extremely prodigal: the surgeons of

London, beside, shewed me every species of kindness; I received from them marks of esteem, I could almost say, of deference, which I was far from expecting. They took a great pleasure in informing me of whatever I wished to learn from them, and shewed the greatest interest in learning from me different peculiarities of our surgical practice. They carried this interest so far, as to desire I would go through some of our operations before their eyes, and even that I should perform upon some of their patients different operations, according to our mode of proceeding. The proposition was too honourable for me to refuse; and I cannot better return the obliging conduct of the English surgeons towards me, than by giving some details in this particular part of my visit amongst them.

After these very handsome, and doubtless well-merited, encomia on our surgeons, the author, in the presence of many of our surgeons, gave some proofs of the efficacy of moxa in white swellings of the joints—a remedy at that time not used in our hospitals. For this purpose an opportunity presented itself at St. Bartholemew's Hospital. This was done in the presence of Mr. Lawrence, upon a young woman who laboured under a paralysis of the deltoid muscle. A few days after the application, which was made immediately below the acromion, the movements of the arm began to be re-established.

"At Guy's Hospital, one of those which I have most frequented, because, at this time, a man who joins to extensive knowledge a great degree of activity, Mr. A. Cooper, is there giving to surgery the greatest eclat, several patients affected with white swelling of the knee, were found under such circumstances as to induce a trial of the moxa.

"During my stay in London, Mr. Brodie, a young surgeon already known among us by some ingenious researches in Physiology, and who holds a high rank as a practitioner, had occasion, at the hospital of St. George, where he replaces Mr. Home, whom he promises to be worthy of succeeding, to make the ligature of a polypus of the nose behind the velum palatum, in the superior part of the pharynx. It was the first time he had met with such a case. Not having decided which of the different methods to adopt, he condescended to ask my advice. I pointed out to him the method of Desault, not as being absolutely the best of all those that have been contrived for including in a ligature the pedicle of a polypus of this nature, and deserving of an exclusive preference, but as being that which I had several times adopted with advantage. I shewed him the mode of accomplishing this; and if Mr. Brodie paid me a great mark of deference in employing it on my recommendation, in preference to other methods with which he was acquainted, he has likewise furnished me with an opportunity of observing in him a truly surgical talent, by the confidence and precision with which he executed the operation, which, on accouut of the bulk of the tumour, was not without some difficulty."

The author proceeds in this style to remark on, and to compliment, as he passes along, our surgical talent, noticing the various operations, works, &c. of some of our best and most enlightened surgeons, the most conspicuous of which, as connected with our public institutions, "belong," says M. R. "if I may so express myself, to another generation—to a generation more recent, which, he observes, promises to England surgeons not less illustrious than those mentioned in the first setting out of the work."

M. Roux notices Mr. Lawrence's treatise on hernia — Mr. Brodie's taste for Physiological experiments and researches — Mr. Travers, he calls the "favoured disciple of Astley Cooper," when speaking of Mr. T.'s work 'Researches and Experiments on Wounds of the Intestinal Canal.' A high compliment is, also, paid to the well known talent of Mr. Charles Bell, by allusion to several of the productions from the pen of this experienced surgeon and erudite author. The author, in fact, takes a general, comprehensive, and we could almost say, barring one or two exceptions, an impartial comparative view of English surgery in in all its bearings.

The work, which we rather apprehend is not so generally known as it ought to be, will amply repay any one desirous of seeing an estimate of English and French

surgery for the time spent in perusing it: although it should never be forgotten, that the author is a native of France, a nation equally jealous as ourselves, in arts as in arms. If not in the whole, in the majority of comparisons, M. Roux does not decide upon the merits of the different modes existing between French and English surgeons—he merely lays down the respective claims of each in the balance; and calls upon neutrality itself to poise the beam."

Extracts from a Work called "PRACTICAL FORMULARY OF THE CIVIL HOSPITALS OF PARIS." By M. F. Ratier, M.D. &c. Paris, 1823, 18mo. pp. 375.

HÔTEL DIEU.—This establishment is the oldest and most extensive of all the Parisian hospitals, as well as the most important as a clinical school. Formerly, diseases of all kinds were here indiscriminately received, but now it is solely devoted to acute diseases, whether internal or external; those affected with particular disorders, such as itch, impetigo, syphilis, and insanity, being sent to hospitals established for the purpose. In the *Hôtel Dieu*, the surgical department is under the direction of M. M. Dupuytren and Margolin; but the only effective individual is the former, whose practice and opinions are thus stated by himself, in a communication to the author of the work now before us.

"The pulling down of the houses near the *Hôtel Dieu*—the free circulation of air around the building, as well as in its interior—the shutting up of those wards which were considered unhealthy, the *assainissement* of others by reducing the number of beds—the bringing down of the windows as low as the floors—the removal of the insane, childbed women, contagious diseases, cutaneous or others; of ulcers, old and infirm people, into other establishments—the abundance and choice of every thing necessary for covering the bed and body: of dressings, aliment, and medicines—the order and regularity established in all things—have made the *Hôtel Dieu* one of the most healthy hospitals of the capital. The sight and smell are no longer disagreeably affected as formerly; those adynamic fevers occasioned in such numbers by a confined atmosphere, loaded with putrid miasmata, are scarcely ever observable. The Hospital Gangrene is no longer met with; and M. Dupuytren has been more than once compelled to close his courses of clinical surgery without having been able to present a single example of it to his pupils. The operation of the trepan, performed in cases where its employment is indicated, and under circumstances which are not beyond all resource, succeeds here as well as others, and fails only for similar reasons.

"Probably, however, owing to the precautions taken for favouring the entrance of air into the hospital, for renewing it, and causing it to circulate in the wards, a considerable number of inflammations are observed; it appearing as if, in order to shun one extreme, we should inevitably fall into another. In fact, if we no longer witness putrid and malignant fevers, hospital and other gangrene, we observe pleurisies, pneumonia, and peritonitis: such are the causes of the majority of deaths that occur in the surgical wards. All the bodies of those who have died in these wards, for the last six years, have been opened, without any exception; and we have felt convinced, as Desault had frequently stated, without being able to furnish any proof of it, that the greatest part of those who die during the treatment of surgical affections, fall victims to internal inflammations, which most commonly exist to the number of two, three, or four, in the same subject.

"This observation has not been passed over in the treatment of surgical diseases. Diluents and refrigerants have assumed, in almost all cases, the place of tonics: bloodletting and leeches have taken that of excitants and stimulants. Scarcely a pound of cinchona is employed internally, and a few pounds externally, in near three thousand sick who are received into, and treated annually in, the surgical wards.

"Fractures are almost all treated by position: some, such as those of the neck of the femur and of the humerus, by this means solely; others by position, aided by bandages, destined rather to prevent motion than to act with any force upon the limbs. Continued extension is not adopted in any case.

"The frightful apparatus for the reduction of fractures and luxations has been banished, and milder methods have been substituted.

"Hernias are operated on immediately after admission.

"The operations for cataract are performed by depression, and in the patient's bed; thus preventing the inconvenience of removal after the operation.

"The mortality is reduced, in an ordinary year, to 1 in 18, 19, and 20. The operation for the stone succeeds in five-sixths of the individuals: the operation of hernia in three-fifths: that of the cataract in seven-eighths: that of the fistula lachrymalis, by the introduction of the cannula of gold or platina, in nineteen-twentieths." pp. xxiii—xxviii.

Independently of the school of clinical surgery at the *Hôtel Dieu*, there is one for clinical medicine, which the physicians of this establishment take charge of by turns, and every three months. The Physicians are, MM. Recamier, Petit, Husson, Osselin, Borie, De Montaigu, and Geoffroy; none of whom, except, perhaps, the first, are men of much repute.

Hôpital de la Salpetriere.—This immense establishment is not only an hospital, but also an establishment for the reception of old females, or those affected with incurable diseases and infirmities. In separate buildings are also received females labouring under mental alienation. This portion of the establishment is under the direction of Professor Pinel and of Dr. Esquirol; the latter of whom has, however, the sole management of the patients. The surgical wards are committed to Professor Lallemand; and the infirmaries of the poor department to MM. Rostan and Ferrus.

It is principally to study the phenomena of insanity under the intelligent Esquirol that *La Salpétrière* is visited by the student. Every attention is paid by that gentleman to the afflicted objects under his care; and he is justly held in considerable estimation amongst his professional brethren for the skill which he exerts in the management of these obstinate and heart-rending cases. Two of this gentleman's *élèves*, MM. Falret and Georget, have already shewn themselves to be worthy pupils of such a master. The former has, at very considerable expense, formed a private establishment for the insane at Vanvres, near Paris, and both are alike known, not only amongst their countrymen, but on this side the Channel, as authors of valuable dissertations on diseases of the nervous system, and as active labourers in the periodical literature of their country.

The following extract from M. Ratier's small volume, as communicated to him by M. Esquirol, will expose the plan which he generally adopts in the treatment of these distressing affections:—

"In order to restore to its healthy

condition the brain labouring under mental alienation, the physician may employ two modes of practice: the one consists in modifying the organ by the exercise of its functions, and is called *intellectual* and *moral;* the other is drawn from the ordinary resources of therapeutics, and is intended to fulfil various curative indications—this is called *physical.*

"A. *Moral and Intellectual Treatment.*—1st, To isolate the insane from those objects which have excited the disease, from relations or servants whom they detest, or whom they will not obey. 2d. To treat them with mildness, but occasionally with firmness. 3d. To class them in the establishment so that they cannot injure themselves, and so as to contribute to their cure; to place together the furious in a quarter remote from those of other patients; to confine others in a state of great excitation in rooms but little lighted or perfectly dark; not to constrain those who feel excessively hot to cover themselves with too warm or too tight clothing, even in winter. 4th. To entirely separate the convalescents from all the other insane, by sending them successively into more quiet dormitories, in proportion as they approach the time of their discharge; to be careful to remove from these dormitories those who are likely to have a new paroxysm or exacerbation; to excite those whose reason is not entirely disturbed or destroyed, to work, play, or promenade. 5th. To employ only, as means of restraint or punishment, the strait-waistcoat, confinement in a cell, the passage from one division into another, the shower-bath, &c. but never blows, chains, and other bad treatment; to be careful of the first interviews of patients with their relations or friends; to occasionally provoke strong moral commotions by a surprise, a fright, or unjust reprimand; to substitute one passion for another, as religion for love; not to enter into vain discussion with the insane; to be especially careful not to drive them into anger or passion, either by mocking them or directly combating their ideas, passions, &c.; to encourage the congregation of the convalescent; to exert over those who have a *penchant* for suicide the most active *surveillance,* even for a considerable period after they appear to have lost the horrid idea—otherwise a risk would be incurred of being the dupe of dissimulation concealed with admirable prudence; to watch also and isolate those addicted to masturbation or a more detestable vice; to avoid reminding those who are cured of the extravagancies of their delirium, or the causes which had disagreeably affected them, unless they are the first to draw attention to the subject; to recommend the removal of those causes which might produce a relapse. Such are the principal rules for the moral treatment of the insane made use of at *La Salpêtrière.*

"B. The *physical* treatment is composed of *hygienic* and *medicinal* agents.

"*Hygiène.*—To preserve the patients from the influence of excesses in temperature, and from the sudden vicissitudes of the atmosphere, by keeping them, during winter, in places sufficiently warmed; and preventing them from going barefoot in iced water or snow, and particularly by preventing them, during great heats, from receiving the action of the solar rays; to wash every day and air the cells of those who are dirty; to fix in bed during the night those who have a mania for lying on the floor, and those paralytics who would throw themselves involuntarily out of bed, or, still better, to place the latter in a sort of trough, which may retain them without re-

straint; to be very careful in covering the insane in the night, especially during severe cold, to avoid frost-bites on the feet—nothing is better adapted for fulfilling this indication, than to put a layer of straw above the coverings; to exhibit in all cases one or two baths, for cleanliness; to cut the hair whenever there exists much heat of the head, and a constant state of irritation, or of congestion towards this part, or, also, when, the patients being furious, it is impossible to take care of the hair; to distribute four times a-day a healthy and abundant nourishment, and particularly to rarely refuse meat and drink to the patients, even during the night; to exhibit to those who obstinately refuse aliments glysters of soup; to to inject into the stomach, by the aid of a sound introduced into the œsophagus, milk, broth, and sometimes wine: the pain which the presence of the sound occasions in the nostril frequently induces patients to eat; but sometimes they are so obstinate that they bear all rather than abandon their determination.

"Although but few remedies are employed at *Salpêtrière*, and, properly speaking, but few formulæ used in the *clinique* of M. Esquirol, some idea may be given of the medicinal agents with which he assists the *hygienic* and moral part of his treatment.

"*Curative Indications.*—Madness is commonly of long duration: its nature is very difficult to appreciate, at least in the majority of cases; the indications of treatment founded on this knowledge are consequently almost always difficult to lay hold of, often scarcely or not at all determinate.

"It must be likewise observed, that this disease does not always offer very favourable chances of cure, since, from the registers kept at *Salpêtrière*, scarcely one-third of those who present no signs of incurability are cured. All these causes should render the physician very circumspect: he will abstain from prescribing remedies rather than risk giving them without indications, which might produce effects different from what he desired: he should particularly guard against being imposed upon by the violence of certain symptoms, and believing that the cause of the evil is in a ratio with their intensity.

"In two circumstances only can the physician act with a certain vigour—when the disease is at its *debut*, or when the employment of means rationally indicated has been continued for a considerable time, and incurability is to be feared. When mania has passed into a chronic state—after several years' existence, if it should degenerate into dementia, especially if complicated with paralysis—there is nothing more to be attempted: the physician has merely in view to prolong life, by preventing or combatting the cerebral or other affections which may threaten it.

"The nature of this work does not permit us to enter into the detail of the curative indications which may present themselves in the course of insanity, and to point out the appropriate means; we shall, therefore, confine ourselves to a few considerations on some of the means principally made use of.

"*Blood-letting.*—Blood-letting has been frequently abused, owing to general plethora and cerebral congestion having been confounded with the state of furor, and it having been believed that furor might be removed by diminishing the mass of blood: this opinion is erroneous; plethora and cerebral congestion have other characters than furor—characters which very frequently

exist without the latter; and it is vain to hope to calm with certainty a *furieux* by bleeding him *ad deliquium:* patients have become more furious after bleeding, and they have not ceased to be so until they have resumed their strength. Paroxysms of mania, with furor, have persisted the same lapse of time with and without bleeding. But when a real plethora exists—a state of cerebral congestion—especially towards the *debut* of the disease, we should not hesitate to abstract blood, either generally or by cupping or leeches. Should there be a suppression of any habitual sanguineous discharge, those means should be directed towards the parts which were the seat of the periodical evacuation.

"*Baths.*—Warm, rarely cold, baths are employed at *Salpêtrière:* they are a very useful agent in assuaging diverse symptoms.

Shower-bath.—The shower-bath is rarely used, and with considerable circumspection, especially when violent pain or very intense heat exists in the head. The shower-bath is more frequently employed as a means of restraint for those who have taken some fatal and bold determination; for example, that of suffering themselves to die of hunger. It ought not to be continued longer than a few seconds, rarely for more than a minute.

"Cold applications and affusions on the head are often a very good sedative, and always without danger. In cerebral congestions the chief means are, bleeding from the jugular, or the application of leeches to the neck; a warm bath, in which the patient should remain submersed for a longer or shorter period, during which refrigerant applications should be made to the head.

"*Emetics.*—Emetics are advantageous from the shocks which they communicate in certain cases of stupor and insensibility, without any sign of irritation; but they cannot be used with too much prudence, on account of the impulse which they give to the blood towards the superior parts.

"*Purgatives.*—These are often useful, both for removing constipation—a symptom of great importance, and to which considerable attention should be paid—and for establishing a salutary derivation towards the intestinal canal.

"*Derivatives.*—Derivatives to the intestines and skin are of general and very advantageous use in the majority of alienations, and especially in those which supervene on parturition. Purgative *lavements* and cutaneous suppurations are preferable to others in those cases.

"*Moxas, Blisters, and Setons.*—The application of moxas on the head has cured several individuals: once a mortal inflammation of the brain was produced by it, and frequently the disease has not changed its form. The same may be said of the application of the actual cautery. The seton on the nape of the neck and blisters have been equally used, after the same principles and with similar precautions.

"*Narcotics.*—They are rarely useful at the commencement of the disease: frequently they are devoid of any effect; and when they procure sleep, they almost always suffer the delirium to continue.

"*General Means.*—Acidulous, mucilaginous, and nitrous drinks are given in abundance during the period of irritation. It is occasionally useful to employ light tonics when there is a necessity for sustaining the strength: in a word, we are to be guided by the general principles of therapeutics."—Pp. lxx—lxxxiv.

Nugæ Chirurgicæ, &c. &c

[Continued from p. 161.]

Glynn, Robert, M. D. of Cambridge, was educated at Eton and King's College. He studied medicine, but preferred the indolent life of a college to practice. After being 63 years, for his wit, his learning, his interesting fund of anecdotes, the favourite of his society, he died 1808, aged 82. He is known as the author of the "Day of Judgment," a poem of merit, which obtained the Setonian prize, at Cambridge, 1737. His Portrait, and the following *jeu d'esprit*, prove his physiognomy not to have been of so agreeable a cast:

This morning, quite dead, Tom was found in his bed,
Altho' he was hearty last night;
But 'tis thought, having seen Dr. Glynn in a dream,
That the poor fellow died of the fright.

Graham, Dr. the celebrated lecturer. The nature of his doctrine may be learnt from one of his publications, "Convicto Amoroso;" or a Seri-Comico-Philosophical Lecture on the Causes, Nature, and Effects of Love and Beauty—at the different periods of human life; and in praise of the genial and prolific influences of the celestial bed! as delivered by Hebe Vestina! the rosy goddess of youth and health! from the electrical throne, &c. 1782.

Godfrey, Ambrose. G. V. Gutch, *sc.* 1736. in a cap. oval frame, 4to.

This person was a chemist, and nephew to Mr. Ambrose Godfrey Hanckwitz, and not his son, as supposed. He tried his uncle's invention for extinguishing fires by explosion, in a building erected for that purpose, in 1761. The Godfrey family have flourished with great reputation in Kent for many ages. This gentleman and his successor continued to maintain their professional consequence, as chemists and compounders of medicine, at their house in Southampton-street, Covent Garden, for more than a century, it being but very lately that their business has passed into other hands.

Greenhill, Thomas. *Chirurgeon.* Nutting, *sc.* 1705.

A pyramid; Fame, Mercury, and other emblematical figures, prefixed to his "Art of Embalming," 1705.

Thomas Greenhill, a Surgeon, distinguished himself by a "Treatise on Embalming," a subject, at the present day, which is esteemed of no very great consequence. It is obvious, however, to mention here, that the art was attempted to be revived, some few years since, by the late Dr. William Hunter, and with considerable success, as to the preservation of the form and countenance; as the person of Mrs. Van Butchel, wife of the well-known practitioner of that name. On which occasion the classical pen of that eminent physician and distinguished scholar, Sir George Baker, was employed in writing an inscription for the glass-case in which the body was preserved.

Halle, John. "Master John Halle, a most famous man," was one of the first English Surgeons who attempted to treat on Anatomy, which Halle did, very much to his own satisfaction, in a "Very useful and necessarie briefe Worke of Anatomie;" he saying, that it was a more useful and profitable one of the kind than any that had hitherto been published in the English language. A notion of the previous state of anatomical works may be formed, when it is stated, that this satisfactory performance con-

tained two rude *wood-cuts*, exhibiting a front and back view of the human figure, with a few references to the names of the external parts.

At this time Surgery was distinct from Medicine, but united with the office and occupation of the Barber; *Capitis Rasura* being expressly mentioned in a warrant issued to the King's Surgeons, 1454, as part of their duty.

The state of Surgery, therefore, was such as might naturally be expected; "many rotted and perished for lack of help of Surgery, and daily died." To remedy these evils, the Honourable Baron John Lord Lumley, and the learned Richard Caldwell, Doctor in Physic, did institute a public lecture to be read in Surgery, in Knight Rider-Street, Wednesday and Friday, the reader whereof was to be Richard Foster, Doctor of Physic, during his life; and Stow, vol. II. p. 209, informs us, that this learned person was met by the chief members of the Barbers' Company, two of whom, being called Masters of the Body, put in practice, or demonstrated, what the Doctor directed.

Many chirurgical works of this date are lost; but we may judge of the library of Barbers' Hall by those that have come down to us; such as Ardern, John of Gadesden, Gale, Halle, Vicary, Rawlings's "Booke of Medycene," 1573; Phayer's "Declaration of the Veynes of Man's Body, and to what Dyseases the opening every one of them doe Service," 1544; and Turner's "Herbal." Of those that are lost to posterity may be mentioned "A Booke in Chirurgery," by Thomas Morstede, Surgeon to Henry VI. and the "Booke of Physyk and Surgery," called "*Rosse and Constantine*," given, by will of Thomas Colard, Barber, 1467, to the Barbers' Company.

HAMON, JEAN, M. D. C. Desrochers, *sc.* 1687. Ætat. 69. De la Faculté de Paris.

Ce Docteur si fameux par ses rares vertus,
A bien moins appliqués à Science profonde,
A prolonger notre vie en ce monde,
Qu'a nous montrer pour quoy nous y sommes venus.

HAMPE, J. H. M.D. F.R.S. Angelica Kauffman, *pinx.* T. Burke *fecit.* A very singular character. Died 1777.

IOHANNES HENRICUS HAMPE
SIEGENA-NASSOVICVS
MEDICINAE DOCTOR DVISBVRGENSIS CLIVORVM
MEDICVS REGIVS TRICENARIVS
PRACTICVS LONDINENSIS QVINQVAGENARIVS
ACAD. IMPER. NAT. CVR. SOCIETAT. REG. LOND. SOCIVS
PERANTIQVVS
SENEX OCTOGENARIVS TEMPERATISSIMVS SANISSIMVS
PER QVINDECIM ANNOS VIXIT
QVOAD LIQVIDA INVINIVS ΥΔΡΟΠΟΤΗΣ
QVOAD SOLIDA ΛΑΧΑΝΟ-ΜΑΖΟΦΑΓΟΣ
SOLA CIBORVM ΑΝΑΙΜΑΚΤΩΝ ET PAVCITATE ET SIMPLICITATE
PERVIRIDEM SENECTVTEM ASSECVTVS
RARISSIME PER DIEM VLTRA DVODECIM SOLIDORVM VNCIAS
CONSVMENS
CORPORIS SICCITATE ET MIRA AGILITATE COMSPICVVS
EXTERNORVM ET INTERNORVM SENSVVM INTEGRITATE
ANIMAQVE PERTVRBATIONIBVS VACVA BEATISSIMVS
(ΡΩΜΗ ΨΥΧΗΣ ΣΩΦΡΟΣΥΝΗ)
AD LONGAEVITATEM MORTEMQVE SANAM OMNI MORBORVM

GENERE VACVAM (ΕΥΘΑΝΑΣΙΑΝ) ASPIRANS
VTPOTE FELICITATEM MVNDANAM VERAM ET VNICAM
NEC NON EXTREMAM ARTIS SALVTARIS METAM
AD QVAM CONTINGENDAM NVLLA DATVR VIA
NISI PER ILLVD ΠΥΘΑΓΟΡΟΥ ΓΑΣΤΡΟΣ ΚΡΑΤΕΙΝ
SYSTEMATIS METALLVRGIAE EXPERIMENTALIS
ANGL. IDIOM. AVTOR.

Nichols's Lit. Anec. vol. III. 235.

HEWSON, WILLIAM. An eminent anatomist. Born 1739. Died 1774.

He was some time partner with Dr. William Hunter. An unfortunate dispute separated those able men, and Hewson read lectures in his own house. He published enquiries into the properties of the blood, and the lymphatic system, and had a literary controversy with Dr. Ab. Monro, about the discovery of the lymphatic vessel of oviparous animals. Hutchinson. Chalmers.

HODGES, NATHANIEL, M. D. Died 1684.

The claims of philanthropy rescue the name of Hodges from oblivion. His patriotic and solitary courage emboldened him to remain the only physician in London, during the whole course of the great plague, of which he lived to give the best and only authentic account.

HOLLAND, PHILEMON, M. D. H. H. invenit. Marshall, *sc.* Ætat. 80, 1632.

Called the translator-general of his age. He made the following epigram upon writing a large folio with a single pen:

With one sole pen I writ this book,
Made of a grey goose quill;
A pen it was when I it took,
And a pen I leave it still.

Born at Chelmsford 1551. Died 1636.

HUNTER JOHN. Born 1728. Died 1733.

"The greatest physiologist the world has ever known."

At the time of his death he was in the sixty-fifth year of his age, the same age at which his brother, Dr. William Hunter, died. The two brothers raised the anatomical school of London to its present celebrity, and in their museums erected their own monuments! Both arrived in London with no capital but genius, industry, and integrity. Each arrived nearly at the same age, finished his career in the same time, and each in the *arena* of his own labours. The first struck with the approaches of death in his own theatre, and in his expiring moments anxious to return, that he might communicate a physiological fact he never could ascertain till then. The other expiring on the spot!

JACQUES, FRERE. Pool, *pinx.* P. Shenk, *del. et sc.* Lithotomis omnium Europæorum peritissimus. Born 1651. Died 1697.

His method, rude and unskilful as it was, formed the basis of all the improvements that have since been made in the operation, and of the present mode of performing it.

JEFFERIES, J. M. D. J. Russell, *pinx.* Caroline Watson, *sc.* 1786.

One of the first persons who ventured to ascend in a balloon.

JONES, GEORGE. Drapentier, *fecit.*

Who modestly says, "to whom God hath given the gift of healing."

He made "Friendly Pills, of the true Tincture of the Sun; they make patients of all complexions laugh at the time of taking them, and cure all curable distempers."

KENRICUS, DANIEL, M. D. F. White, *sc.* Ætat. 32, 1685.

Dr. Kenrick practised as a physician at Worcester. He was not a graduate, nor very able in his profession; but was esteemed a man of wit, and a jolly companion. These lines, "Upon a Giant Angling," printed in the fifth volume of Dryden's "Miscellany," are said to have been written by him:

His angle-rod made of a sturdy oak,
His line a cable that in storms ne'er broke,
His hook he baited with a dragon's tail,
And sat upon a rock and bob'd for whale.

KING, EDMUNDUS, Knt. M. D. physician to Charles II. P. Lelii Eques, *pinx.* R. Williams, *sc.* Died 1709.

He was originally a surgeon, and saved the king's life, at a critical moment, by bleeding him.

Evelyn gives the following account of his bleeding King Charles, vol. III. 580:

"1685, 4 Feb. I went to London, hearing his Maty. had ben, the Monday before (2 Feb.), surprised in his bed-chamber with an apoplectic fit, so that if, by God's providence, Dr. King (that excellent chirurgeon as well as physitian) had not been accidentally present, to let him blood (having his lancet in his pocket), his Maty. had certainly died that moment, which might have ben of direful consequence, there being nobody else present with the king save this doctor and one more, as I am assur'd. It was a mark of the extraordinary dexterity, resolution, and presence of mind, in the Dr, to let him bloud in the very paroxysm, without staying the coming of other physitians, which regularly should have ben don, and for want of which he must have a regular pardon as they tell me."

The privy-council approved of what he had done, and ordered him £1,000, but which was never paid him.

LOCKYER, LIONEL. J. Sturt, *sc.* Died 1672.

"The true Effigies here you may behold
Of him, who, for preventing others' ill,
Hath gained a Medicine far exceeding Gold,
And known to all the world for Lockyer's Pill."

His epitaph records, that

"His Virtues and his Pills are so well known,
That envy can't confine them under stone:
But they'll survive his dust and not expire,
Till all things else, at th' universal fire.
This verse is lost; his Pills embalm him safe
To future times, without an Epitaph."

MACKENZIE, ALEZANDER, M.D. Water colours W. W. From an original picture by Foolston, 1784.

He died Jan. 5, 1803, at Cromarty, in Scotland, in his 86th year. In 1777 he communicated to the Royal Society an account of a woman in Rosshire who lived four years without food, except twice in that time she took a draught of water. He was not much known in England, having practised the greater part of his life in Virginia.

There have been many very respectable physicians of this name, though none of great eminence. Dr. James Mackenzie, of Worcester, was, perhaps, one of the most conspicuous as a practitioner. He wrote on health. Dr. Colin Mackenzie, of the Borough, was also an able man in his way, as a practitioner in midwifery. He wrote in the periodical publications of the day, and gave lectures, which were well attended. His collection of

preparations was bought by Dr. Orme for one thousand guineas. He died in the Borough about 1773, aged 70, leaving £12,000 to his brother.

MAYNWARING, EVERARD, M.D. R. White, *sc.* Ætat. 38, 1668.

He was author of many works; his last was "Serious Cautions against excessive Drinking, with several Examples of God's severe Judgments upon notorious Drunkards, who have died suddenly."

MINSICHT, HADRIANUS. D. Diricksen, Hamburg, *sc.*

Est hic Mynsichtus, qui nunquam cernitur ulli,
Cernit eum nisi ovans in Chymicâ arte chorus.

PARACELSUS, PHILIP THEOPHRASTUS. Bombast de Hohenheim. W. Hollar, *sc.*

He lived in the fifteenth century. The cures he wrought were so surprising in that age, that he was supposed to have recourse to supernatural aid. In a picture of him at Lumley Castle, he is represented in a close black gown, with both hands on a great sword, on whose hilt is inscribed the word Azot. This was the name of his *familiar* spirit, that he kept imprisoned in the pummel, to consult on emergent occasions. Butler humourously describes this circumstance:

Bombastes kept the Devil's bird
Shut in the pummel of his sword;
That taught him all the cunning pranks
Of past and future mountebanks.

READ, WILLIAM. "Oculist and Chirurgical Operator, who, after 22 years' travel and practice, hath Acquired the true Method of performing all Curable Distempers, Incident to ye EYES, as Couching and Cataracts, Glaucomas, Suffusions, as his frequent Performances on Hundreds in England, Scotland, and Ireland, may Sufficiently Demonstrate, as well in the Universytie and City of Oxford, upon severall Blind people, after many years continuance under such Distempers, and who are now (By God's Blessin) restored to their perfect sight that continue after their Couching, which is a Performance that many pretend to, but few perform like him; he does these things upon all Persons before he takes any Money, which is a Confirmation, that he is not one of those many Circumforaneous Pretenders, that Infest this Land. He also furnishes you with approved Remedies yt preserve and strengthen ye Sight in Young or Old; and infallably cure pains in the Head, that very often occasions Gutta Serenas, Black Cataracts, that are never cured, but means may be used in time, that may prevent those Obstructions in ye Optick nerves, that occasion them. You may have faithfull Advice of him whither you are Curable or not, and may be Spoken with at his Lodgings from 8 in the Morning till 6 in the Evening."

"Hee cureth ye Poor of Blindness, Cancers, Weues, Heair Lipes, Wry Neckes, aud Dephness for Charity."

READ, Sir WILLIAM. Faithorne, jun. *ad vivum, sc.* A Quack Doctor.

Knighted by Queen Anne, and died 1715. The following lines were written on him by Mr. Gwinnett:

The Queen, like Heaven, shines equally on all,
Her favours now without distinction fall.
Great Read, and slender Hannes, both knighted, show
That none their honours shall to merit owe.

That Popish doctrine is exploded quite,
Or Ralph had been no Duke, and Read no Knight
That none may *virtue*, or their *learning* plead,
This has no *grace*, and that can hardly *read*.

RUSSEL, ALEX., M.D. F.R.S. Died 1770. Dance, *pinx.* Trotter, *sc.* 1770.

Innocuas placide Corpus jubet urere Flammas,
Et justo rapidos temperat Igne Focos.
Extorsit Lachesi Cultros pestique Venenum,
Abstulit, et tantos non sinit esse Metus.

SALMON, WILLIAM. R. White, *sc.* Ætat. 43, 1667.

He calls himself Medicinæ Professor. Garth hints at him in his Dispensary:

Cowslips and poppies o'er his head he spread,
And Salmon's works he placed beneath his head."

SERMON, WILLIAM, M.D. Sherwin, *ad vivum del et sc.*

Was possessed of a palliative remedy for the Dropsy, by which the Duke of Albemarle was greatly relieved; but he not long after relapsed into this distemper, which at length proved fatal.

Let Zoilists carp at what is past and done,
Brave Sermon's acts shall live in the face o' th' sun.
Great Monck, restorer of his country's peace,
Declares from him his dropsy soon did cease.

SMITH, JAMES. Oculist and Artificial Eye-maker. J. Trunk, *pinx.* J. Pine, *sc.* Scarce.

Britain's FAM'D OCULIST displays his Art
In COUCHING Eyes, and bettering of that Part.
His Skill is great, yet that's a nobler Skill
Which can ye room of *bad* wth *new* ones fill;
This does my FRIEND, this he alone can do.
Let FOREIGN REALMS their Genius boast no more
For new Inventions, unconceiv'd before,
Since SMITH, and all yt know him know 'tis true,
Is ENGLISH born, and loves his country too.
Thus as our MONARCH others does excel
In wisdom, power, and in ruling well,
So do his loyal subjects theirs outvie,
As well in Arts as in sweet Liberty.

TAYLOR, JOHANNES. Chevalier Ryche, *pinx.* J. Faber, *sc.*

In Optica expertissimus, multisque in Academiis celeberrimis Membrum.

Effigiem Taylor, tibi qui demissus ab alto est,
Turba alias expers luminis, ecce vides.
Hic Maculas tollit, CATARACTUS depremit omnes,
Amissum splendens excitat ille jubar.
Mirandâ praxi sublata OPTHALMIA quævis
Artifici dextræ GUTTA SERENA cedit:
Ecce VIRUM! cujus cingantur tempore lauro
Dignum, cui laudes sæcula longa canant.

MEDICAL RECORDS *and* RESEARCHES, *selected from the Papers of a* PRIVATE MEDICAL ASSOCIATION. (London, Cox and Son, St. Thomas'-street, Borough)—pp. 288.

As our reviews and notices of books are not confined either to the ephe-

meral productions of the day, or to the precocious fungi that are every hour emerging from the press, it may be unnecessary to state, that our retrospective limits embrace a sphere equally as liberal and extensive as the prospects that lie before us.

The present work is a proof how little taste often actuates the busy world. The crude scribblings of young men, without practice or experience, anxious to see their name in a medical journal, are preferred to the mature and well-concocted matter of the sages of our art. Surely, to say no more on this subject, there is a lack of taste as well as of judgment in our periodical compilers at least, who give the preference to chimerical juvenile vanity, while they, equally ungenerously, consign to the shelf productions alone worthy of record and of reference.

As a proof of what we have here advanced, we will adduce the work now before us, which, at the time it first appeared, was intended to be continued—and why was it not continued? Shall we say, because there were neither genius, talent, nor capability to usher it, with any just pretensions, into the world. Let us see then who are the men who thus presumed to *insult* us with the medical records and researches of a "private medical association."

Case I.—*A Case of Strangulated Hernia, in which a Part of the Abdominal Viscera was protruded into the left Cavity of the Chest. By* Mr. Astley Cooper, Lecturer on Anatomy and Surgery, at St. Thomas' Hospital, and Surgeon to Guy's Hospital.

Case II.—*A Case of Tic Douloureux, or painful Affection of the Face, successfully treated by a Division of the affected Nerve. By* John Haighton, M.D. Physician to the Eastern Dispensary, and Lecturer on Physiology and Midwifery, Guy's Hospital.

Case III.—*Account of a ligamenitous Union of the Tibia after the Removal of a carious Portion of that Bone. By* Mr. Richard Smith, Surgeon to the Bristol Infirmary. —Communicated by Mr. Astley Cooper.

Case IV.—*A Case of a penetrating Wound by a Bayonet passing through the Heart, in which the Patient survived the Accident upwards of nine Hours.* Communicated by William Babington, M.D. Physician to Guy's Hospital, by the permission of John Lind, M.D. Senior Surgeon to his Majesty's Royal Hospital at Haslar.

Case V.—*An Account of a Rupture of the Aorta, near the Heart. By* Mr. J. Lynn, Jun., Surgeon, at Woodbridge. — Communicated by Mr. Astley Cooper.

Case VI.—*On the Use of the Tinctura Ferri Muriati in those Suppressions of Urine which arise from a spasmodic Affection of the Urethra.*

It was Mr. Cline, Sen., who first discovered the efficacy of this medicine in relieving spasms of the urethra.—(See Old Series.)

Case VII.—*Three Instances of Obstruction of the Thoracic Duct, with some Experiments, shewing the Effects of tyeing that Vessel. By* Mr. Astley Cooper.

Case VIII.—*Two Cases of Rabies Canina, in which Opium was given, without Success, in unusually large Quantities. By* Drs. Babington and Wavell. — Communicated by the former.

Case IX.—*Case of Cæsarean Operation performed, and the Life of the Woman preserved. By* James Barlow, Surgeon, late of Chorley, Lancashire, but now of Blackburn, in the same county.—Communicated by Dr. Haighton.

Case X.—*A singular Case of Lithotomy. By* R. B. Cheston, M.D. —Communicated by Dr. Babington.

Case XI.—*Observations on the Cure of Hydrocele by Injection. By* J. R. Fane, Surgeon.—Communicated by Mr. A. Cooper.

Case XII.—*An Enquiry concerning the true and spurious Cæsarean Operation, in which their Distinctions are insisted on, principally with a View to form a more accurate Estimate of Success; to which are annexed, some Observations on the Cause of the great Danger. By* John Haighton.

Case XIII.—*A Case of unperforated Hymen, attended with uncommon Circumstances. By* John Sherwin, M. D., and Member of the Corporation of Surgeons.—Communicated by Dr. Haighton.

When cases, like these, of such paramount and first-rate importance to science and to the cause of humanity could not possess sufficient interest and attraction to ensure a continuation of the work—when cases, like these, witnessed and communicated for the benefit of mankind, treated by Stars of the first Magnitude in the hemisphere of British Surgery, are suffered to moulder on the bookseller's shelf, what may not the secondary objects in the same constellation anticipate from their labours in the vineyard of information. To what cause are we to ascribe such an extraordinary paralysis in human discrimination? Is it to the optic or auditory nerves that we must place it—or, with a greater proportion of probability, might not M. Rostan trace it to a softening of the brain; or might not Lobstein find it allied, in some degree, to a loss of nervous influence in the grand sympathetic. Whatever, therefore, may be the cause, we once more assure our readers, that the pages of the NEW MONTHLY MEDICO-CHIRURGICAL REVIEW, &c. will be as much consecrated to the retrospective review of works as well as cases of merit which have either been insufficiently or only partially noticed, or, for other reasons not noticed at all, as they are to the other subjects which hitherto they, in reality, profess to embrace.—*(See Notice to Correspondents.)*

MEDICO-CHIRURGICAL VARIETIES, &c.

Cure of Tinea Capitis by the Chloruret of Soda.—In a letter addressed to the *Académie Royale de Médecine,* M. Roche announces that he has cured, in the space of three months, a case of *porrigo favosa,* which had continued for nearly eleven years, and had resisted all known means. The remedy was used in the form of a lotion assiduously applied.—*(Nouv. Biblioth. Médic., Mars,* 1824.*)*

On Plants possessing the Power of Dilating the Pupil. By M. Ferdinand Runge, of Berlin.—The power possessed by the atropa belladonna of dilating the pupil is well known, and this knowledge has been successfully applied to various therapeutical purposes. M. Runge has found that this property resides in every portion of the plant, as well as in the *hyoscyamus niger, albus, reticulatus, scopolia;* the *datura ferox, stramonium, tatula, fastuosa,* and *metel.* The following plants, on the contrary, had no action on the pupil:—*Arum maculatum* (the root); *veratrum nigrum* and *sabadilla* (the seed); the *colchicum autumnale* (root); *lolium temulentum* (seed); *secale cornutum; paris quadrifolia* (grain); *scilla ma-*

ritima (root); *crocus sativus*; *asarum europæum* (root); *daphne mezereum* (bark); *rheum rhubarbarum* (root); *anagallis arvensis* (herb); *polygala officinalis* (root); *salvia officinalis* (herb); *gratiola officinalis* (herb); *digitalis purpurea* (herb and root); *verbascum thapsus* and *niger* (herb); *nicotiana tabacum, fructicosa, rustica, glutinosa* (herb); *soldnum nigrum, dulcomara, lycopersicum* (herb); *cynoglossum officinale* (root); *convolvulus scammonia* (resin); *gentiana lutea* (root); *strychnos nux vomica* (seed); *ledum palastre* (herb); *cinchona* (bark); *psycotria emetica* (root); *pustinaca sativa* (root); *æthusa cynapium* (herb); *phellandrium aquaticum* (seed); *conium maculatum* and *cicuta virosa* (herb); *ænanthe fistulosa* (herb); *angelica archangeliea* (root); *anemona pulsatilla* (herb); *ranunculus lingua, flammula, reptans, humilis, auricomus, sceleratus, acris* (herb); *aconitum lycoctonum, napellus, montanum camarum* (herb and root); *caltha palustris* (root); *papaver somniferum* (opium); *chelidonium majus* (the yellow sap); *raphanus raphanistrum* (herb); *sinapis* (seed); *cochlearia officinalis* (herb); *menispermum cocculus* (seed); *viola tricolor* (herb); *ruta graveolens* (herb); *sedum acre* (herb); *amygdalus persica* (distilled water and seed); *prunus lauro-cerasus* (distilled water of the leaves); *rhus toxicodendron* (herb); *euphorbia officinalis, helioscopia cyparissias* (white sap); *ricinus communis* (seed); *bignonia alba* (root); *elaterium momordica* (pulp); *piper album* (seed); *humulus, lupulus, cannabis sativus* (herb); and *taxus baccata*.—*(Journal de Pharmacie, Fevrier*, 1824.*)*

Action of the Acetate of Morphine on the living System.—Six experiments were instituted on dogs and cats; and the quantity of the substance in question administered was from five to twelve grains by the œsophagus. In one instance we are vaguely informed that fifteen grains were injected into the œsophagus and rectum of a cat. In five of the cases part of the solution was quickly rejected by vomiting. Death occurred in three only (one of the cats, it should be observed, was twice submitted to experiment,) and there is reason to doubt whether, in *one* of these at least, the fatal termination was not influenced or even caused by other means.

The first symptoms, after injecting the acetate of morphine (which we understand to have been in every instance dissolved in distilled water), seem to have come on in a very few minutes, and to have exhibited a speedy and considerable irritation in the circulatory system, accompanied with manifestations of nervous excitement. The pupils were dilated; tremors and convulsions soon followed; and these last generally continued to recur forcibly, either till the influence of the poison subsided, or till the death of the animal. The pulsation of the heart was, in five of the cases, very strong and frequent, diminishing gradually; anxiety and susceptibility of alarm at the slightest noise; restlessness; lethargy; feebleness; *purring* in some of the cats; and in several instances extremely fetid stools.

Besides these symptoms, which were common to all, there was a very striking phenomenon observed regarding the blood. In one of the cats, two hours after injecting the poison, and when the pulsation of the heart was strong, and that of the crural artery distinct, a transverse incision was made where the beating of this had been perceived. Not a drop of blood flowed, and the animal was, apparently, scarce sen-

sible of the operation. The carotid arteries were cut through, and a small quantity of blood flowed; in bulk equal to three ounces of water, very thick, not of the usual bright colour of arterious blood, and quickly drying in the dish which received it.

On opening the bodies of the animals in which the experiment terminated fatally, no alteration of structure was discoverable. The digestive organs are particularly noticed as being sound; but, in the membranes of the brain, the right cavities of the heart, and veins immediately in communication with them, was found black and liquid blood.

Mucous matter was found within the stomach, which, being submitted to the test of nitric acid, was slightly tinged of a yellowish colour; though the result of the application of this test was not sufficiently marked to lead to positive conclusions as to the identity of the acetate of morphine. The salt could not be obtained in the crystallized form; and the result was one in common with that which would be afforded by brucina and trychnina, when treated with nitric acid. The following mode of distinguishing the former of these two last-mentioned from the other, and also from morphine, is noticed. Having treated brucine with nitric acid, the addition of proto-hydrochlorate of tin will produce a violet colour, while the others will yield a brownish colour. These are to be recognized by the symptoms they will respectively induce.

The following is the conclusion of the paper, embracing the inferences drawn by its authors from the previous details.

It was proposed, by these experiments, to determine,—

1. What is the effect of acetate of morphine on the mucous membrane of the stomach and intestines? The proof has been drawn that this substance causes no visible alteration there.

2. If the presence of the poison be discoverable in the digestive canal? In several instances it was distinguished in the stomach, but never in the intestines.

3. If the blood undergoes any alteration; and if, by means of chemical re-agents, any traces of the poison can be found in that fluid?

In this latter object the investigations were fruitless. As to the former, the temperature of the blood was discovered to be much below the ordinary degree in a dog just about to expire. The blood was very thick in a cat two hours after administering the poison; and, in all the cases, it appeared to be in very small quantity.

The paper concludes with a promise of further investigation, particularly of the substances excreted; and with a supposition, drawn from what has been already done, that this poison acts primarily on the nervous system. They confess that their proceedings are open to objections; and reserve the discussion of the question, Whether it acts on the sensibility or on the powers of motion? for another and more elaborate paper, to be produced without delay.—(*La Nouvelle Bibliothèque Medicale, Fevrier*, 1824.

Case of Rabies, in which Warm Water was injected into the Veins of the Patient.—*By* B. Gaspard, M. D., at Saint-Etienne (Loire).

In December, 1823, J. F. Guillemin, a farmer, was bitten in the right hand by a rabid wolf. As he had no knowledge of the rabidity of the animal at the time, the wound was dressed without previous cauterization or excision of the lacerated parts, and healed quickly. He fol-

lowed his usual occupations, experiencing, however, some degree of dread on leaving his house at night. Five weeks after the wound was received (on the 14th January, 1824), he began to feel some pain at the back of the neck and in his shoulders, with slight fever, and rigors. On the 15th, at night, he was seized with horror on attempting to drink some water. On the 16th, the hydrophobia was constant, and all the usual symptoms of the disease present. On the 17th, Dr. Gaspard saw him, in consultation with Dr. Petiot, when it was agreed to try the experiment formerly made by Mr. Magendie, of injecting warm water into his veins. Having exposed the cephalic vein of the right arm, Dr. G. injected, very slowly, about four ounces of warm water, inquiring of the patient, in the course of the operation, if he felt any particular sensations. After the injection of four ounces of fluid, he complained of a tickling and pricking feeling in the whole interior of his chest, although the pulse had suffered no change, either in frequency or fulness. No farther inconvenience having been experienced, at the end of a quarter of an hour, M. Gaspard injected, in an equally slow manner, other four ounces of water, which did not increase the sensations complained of, nor did it accelerate the pulse; the pulse was however more full. Thirst and hydrophobia were undiminished, as were all the other nervous symptoms of the disease. M. Gaspard now waited another quarter of an hour, when the patient began to complain of vertigo, of great lowness, with nausea, coughed several times, and immediately afterwards experienced severe rigors. His pulse became very small and frequent, and his body pale and cold, as on the accession of a severe paroxysm of ague. To these symptoms, which continued about half-an-hour, a hot and a sweating stage succeeded. The three stages of the paroxysms continued about an hour and a half. In other respects the hydrophobic disease remained without the least modification.

The severity of these symptoms prevented M. Gaspard from attempting to inject a greater quantity of warm water; he therefore abandoned the patient to the use of opium. During the night, eight hours after the experiment, the patient experienced another similar paroxysm of fever, with slight delirium and trembling of the tongue and limbs, and the frequent spitting of a frothy mucus. After a frequent discharge of this species of expectoration, he ceased to have any horror at the sight of water, and even drank twice without any pain or repugnance; — a phenomenon remarked in the cases published by M. Trolliet and others. With the disappearance of the hydrophobia convulsive and other nervous symptoms increased; the delirium became at times furious; he menaced the attendants; and, at last, at six o'clock of the morning of the 18th January, the energy of the system was extremely low—the extremities cold—the pulse scarcely sensible—the muscles of the face agitated with spasms—and the mouth continually filled with a frothy mucus. He died soon after the supervention of this state, and 54 hours after the appearance of hydrophobic symptoms. The body was not inspected.

M. Magendie has subjoined a note to this case, in which he seems to stick with unbecoming pertinacity to his notions about the influence of warm water injection over rabies, and objects to the present experiment of M. Gaspard:—1st, That the

patient was not previously blooded. 2dly, That there was an insufficient quantity of water injected.

Granting M. Magendie the full benefit of his objections, we cannot but consider that the issue would have been the same, in whatever way the experiment might have been made.

Leaving M. Magendie to make further experiments, and wishing that he may make them with more judgment, and detail them with more precision than he has done on some former occasions, we shall next notice some experiments, to which M. Gaspard refers, made on a young man in Guadaloupe, aged about 20 years, for an affection of the skin, and published at Leyden, in an inaugural dissertation, 1778, by M. Regnaudot.

1st, The 27th of January, half a spoonful of a weak infusion of the leaves of senna, injected into the median vein of the arm, caused only a short and slight headach.

2d, On the next day, an injection of an ounce of the same infusion, occasioned, in the space of half-an-hour, a violent rigor, followed by heat, some vomiting, and several alvine evacuations. The paroxysm of fever continued nearly eight hours.

3d, The 29th of January, three ounces of an infusion of two drams of the bark of guaiacum, with 48 grains of isinglass, injected into the veins of the same individual, produced, as in the former experiment, in the course of half-an-hour, a very long febrile rigor, followed by intestinal cholic and two evacuations. The paroxysm of fever continued more than nine hours, and terminated with a very copious sweat.

4th, Finally, on the 30th of January, this physician injected into the vein of the same man three ounces of water, holding only in solution two drams of gum arabic. About an hour afterwards the febrile rigor appeared, with a small and frequent pulse. He had three alvine evacuations. A hot stage succeeded the rigors; and the febrile action terminated by a copious perspiration, 15 hours after the injection.

It will be remarked that, both in these experiments, and in the one performed on the hydrophobic patient by M. Gaspard, the injection of the fluid was immediately followed by a regular febrile paroxysm. This effect did not follow the experiment of M. Magendie, wherein two pounds of warm water were injected into the veins of a patient labouring under febrile delirium, in the Hôtel Dieu; but in that particular instance, vascular depletion, to a considerable extent, had been shortly before employed. May not the paroxysms of fever, noticed in the other experiments, arise, in M. Gaspard's case, from the sudden repletion of the vascular system; and in the experiments performed at Guadaloupe, from the presence of an irritating cause circulating in the blood; the continuance of the paroxysms holding a close relation with the quantity and nature of the substances injected? Do not, also, these experiments point to some novel ideas respecting the nature of intermittents, which it is unnecessary to particularize at this place?

New Instrument for Preventing the the Escape of Urine after Operations on the Bladder.

M. Jules Cloquet has presented to the Royal Academy of Medicine, a *syphon*, which will exert a suction that can be graduated at pleasure, and is applicable "in all cases where there must be continual evacuation of liquids from the cavities or their proper reservoirs,"—and particularly in diseases of the urinary passages. It will also effect the evacuation of purulent matter

from the thorax, &c. and of liquids from the stomach, in case of poison. —(*Revue Médicale, Mars* 1824.)

Employment of Iodine in Scrofulous Complaints.—Dr. Henning has administered this remedy in eight cases. The youngest patient was a child two years old only, to whom the tincture was given in doses of five drops, three times a-day; and it was administered to an old asthmatic person, who was subject to enlargements in the lymphatic organs about the neck, by which respiration was rendered still more difficult. He took the tincture also in quantity from eight to ten drops, four times a-day. At the end of a week a critical sweat came on, which lasted several days; and by still continuing the use of iodine, his complaints were much relieved. In all the other cases, which were chiefly of young females, the best effects were derived from the remedy, without any sinister consequences. —(*Revue Médicale, Mars* 1824.)

CHEMICO-PHILOSOPHICAL MISCELLANY.

On a deoxidating Property of the Vapour of Water. By. C. H. Pfaff. —It was remarked by Hermbstadt, while making the experiments from which he deduced the existence of *a peculiar colouring principle* in sea-water, and its superincumbent atmosphere, that if that liquid be boiled in a retort, and if, by means of a glass tube attached to the beak of the retort, the gases and aqueous vapour evolved be made to pass through a solution of nitrate of silver, the latter by degrees assumes the colour of *red* wine, and at the end of 24 hours, a *brownish-yellow* coloured sediment is deposited. I observed the same appearance, on repeating this experiment with sea-water from the bay at Kiel. As, however, I had reasons for suspecting that this change is not occasioned by any peculiar gaseous constituent, I prepared an artificial mixture of solutions of the muriates of magnesia and soda, in the proportions which constitute sea-water, and on making the experiment with this, I still obtained the same result. I observed, also, that the colour imparted to the solution of nitrate of silver at the beginning, and towards the conclusion of the experiment, is different: at first it is a weak violet, but after the experiment has gone on for some time (provided there be a sufficient quantity of the metallic salt in the vessel through which the vapours pass), it has a considerable infusion of reddish-brown. Hence I considered it not unlikely, that in these experiments there are two distinct causes which produce discolouration. This induced me to repeat the experiment in a variety of ways; which at last conducted me to the following very interesting results.

The experiments themselves are extremely simple. The liquids were boiled in clean glass retorts, and great care was taken to prevent any portion of them from being carried over mechanically in the state of drops. The solutions on which the action of the gases and vapours expelled by boiling was to be determined, were contained in Woulfe's bottles, and, in general, the vapours passed through two or three of these in succession. The tubes of communication between the retort and the first bottle, and between the bottles themselves, were plunged to a sufficient depth in the solutions.

1. The *mere vapour of pure* distilled water, when passed through a transparent solution of nitrate of silver, has the property of communicating to it a discolouration, in proportion as it heats the solution to the temperature of ebullition; and the

intensity of this discolouration varies from yellow to dark-brown, according to the concentration of the solution, and to the length of time during which it has been exposed to the action of the vapour.

2. This discolouration is inconsiderable, so long as the solution of nitrate of silver remains under the boiling point, but it becomes exceedingly striking, the instant ebullition commences. The colour which first appears is yellow, but it rapidly becomes darker. The colour of the solution of nitrate of silver, when sufficiently diluted, has a close resemblance to red wine.

3. In the same manner, the solutions of nitrate of silver in the remaining bottles may be discoloured; because the vapour, after heating the liquid contained in one bottle, passes over into the next, and raises its temperature also to the point of ebullition.

4. This discolouration is caused by a deoxidation of the nitrate of silver, and except that it takes place with much greater rapidity, it is similar in all respects to the effect produced by light. In proof of this we may mention, *a*. The similarity of the colours with those produced by the action of mere light. *b*. The complete removal of the colour, and restoration of transparency, by the addition of nitric acid. *c*. The similar deoxidizing effect of the vapour of water upon other metallic solutions, which are easily deoxidized, either by light, or by some chemical action. *d*. The disengagement of *oxygen gas* during the process.

5. The most convincing of all proofs is furnished by a solution of *muriate of gold*. A solution of this salt so much diluted as scarcely to retain a shade of yellow, when heated to the boiling point by a stream of the vapour of water, acquires a beautiful blue colour, exactly similar to the colour produced in it by tincture of nutgalls, oxalic acid, &c.

6. After the expulsion of the atmospheric air, I collected the gas which was disengaged in a constant stream of minute bubbles, from the boiling-hot solution of nitrate of silver. It proved to contain a considerably greater quantity of oxygen than common air: 100 volumes of it mixed with 100 volumes of nitrous gas, sustained a diminution amounting to 91, whereas common air sustained a diminution of only 80.

7. Of the other solutions whose colour is changed by deoxidation, I examined *acetate of silver*, which became discoloured, like the nitrate, but more feebly; and *muriate of platinum*, which underwent no alteration.

8. Sea-water and solutions of common muriate of soda and of muriate of magnesia, when boiled, and when the disengaged vapour is passed through a solution of nitrate of silver, occasion appearances of a more complicated nature. In this case, the metallic solution is decomposed, not merely by aqueous vapour, but by the muriatic acid which is disengaged from the boiling liquid; and a quantity of chloride of silver is formed, which the action of the aqueous vapour subsequently renders violet-coloured, provided it at the same time raises the temperature of the solution of nitrate of silver to the boiling point. Should any portion of the nitrate of silver be left undecomposed, it is deoxidized by the vapour of water, and a yellow or brown colour is developed, which mixes with the violet, and imparts to it various modifications of shade. My original opinion, therefore, that the change of colour is caused by the muriatic acid which distils over along with the water, is confirmed; but at the same time restricted, by this experiment. Muriatic acid is also

disengaged from a boiling solution of the common muriate of soda, although in much smaller quantity, than from a solution of muriate of magnesia. Whether in the case of muriate of soda, the acid proceeds from a small residue of muriate of magnesia, or muriate of iron, I do not venture to determine. Neither of the bases (soda, magnesia) appears to pass over: at least, the distilled water leaves no residue when evaporated.

9. This yellow, reddish-brown, or dark-brown coloured solution of nitrate of silver, produced in so remarkable a manner by the deoxidizing action of aqueous vapour, retains its colour for a long time unaltered, but it at last deposits a dark-brown oxide of silver.

10. If previously to the introduction of aqueous vapour the solution of nitrate of silver be raised to the boiling point by the immediate application of heat, it does not completely retain its transparency after having been exposed as usual to a current of the vapour, but the discolouration which it sustains is greatly inferior.

The deoxidizing property of aqueous vapour, demonstrated beyond a doubt by the foregoing experiments, deserves to be still further investigated, and would, perhaps, already admit of some practical applications. It is my intention to continue my experiments on the subject. Before concluding, I may observe, that the vapour of water does not appear to produce any change upon a solution of corrosive sublimate, or upon solutions of the protoxide or peroxide of mercury in nitric acid.

(From the Annals of Philosophhy.)

On the Nature of the free Acid ejected from the Human Stomach in Dyspepsia.—Our readers know, from the notice of the proceedings of the Royal Society in the *Annals of Philosophy* (Feb. 1824), that in December last, Dr. Prout read a paper before that learned body, the object of which was to prove, that the acid usually found to exist in the stomach of animals, during the digestive process, is the muriatic. An acquaintance of mine, who occasionally suffers severely from dyspepsia, and was somewhat sceptical as to Dr. Prout's conclusions, lately requested me to examine the fluid ejected from his stomach during a violent dyspeptic paroxysm the day before, with the view of ascertaining the nature of the free acid it contained.

The fluid which had been thrown from the stomach in the morning, fasting, when filtered, was perfectly clear, and nearly colourless; it gave a decided red tint to litmus paper. I distilled about six ounces of it almost to dryness, at a gentle heat, receiving the product in three separate and nearly equal portions. One-half of each portion was treated with nitrate of silver. The first had no effect on litmus paper, and scarcely gave the slightest cloud with the test. The second became slightly cloudy by the test, but was equally without any action on the blue paper. The third portion reddened the paper strongly, and produced an abundant dense cloud, when I dropped into it the nitrate of silver, and a pretty copious precipitate collected at the bottom of the tube. The remaining half of the third portion was evaporated by a gentle heat to about half a fluid drachm. The precipitate which a drop of it, placed on a slip of glass, occasioned with a drop of nitrate of silver, was insoluble in nitric acid, and perfectly soluble in ammonia. Another drop, similarly treated with muriate of barytes, gave no precipitate nor cloud. The remainder was neutralized with pure ammonia, further evaporated, and poured on a slip of glass; when it

afforded a multitude of well-defined crystals of muriate of ammonia.

The precipitate from the first half of the same portion by nitrate of silver, being collected, washed, and dried, fused on a slip of platina foil before the blowpipe into horn-silver.

The presence of free muriatic acid in the ejected fluid, and consequently the accuracy of Dr. Prout's conclusions, seem to be fully confirmed by the preceding experiments.—J. G. C. *Ann. Philosoph.*

Method of cleaning Gold Trinkets, and of preserving engraved Copper-plates.—The method used by artists for cleaning gold trinkets, is the application of a mixture of neutral salt, intended to disengage nitric acid, with the assistance of heat. Dr. Mac Culloch recommends instead to boil the trinkets in water of ammonia, which dissolves the metallic copper of the alloy to a certain depth on the surface, so that after the operation the metal is in fact gilded, nothing but pure gold being visible. In this process the waste of gold, which is dissolved by the acid, in the process usually employed, is avoided.

Dr. Mac Culloch observes, "that it is an unaccountable omission of chemists not to have observed that metallic copper is soluble in ammonia. The solution takes place rapidly in the heat at which the water of ammonia boils."

Copper-plates are apt to be injured by laying by; a thin coat of oxide forms on the surface, which is rubbed off by the hand of the workman in the first inking, when the plate is again called into use; and by repetition of the formation of oxide, and its removal, the fine lines on the plate are soon injured, and ultimately obliterated. Dr. Mac Culloch recommends the application of common spirit varnish to the surface when the plate is laid by; it is easily applied, and can be removed when requisite by spirit of wine.—(*Edinburgh Journal of Science.*)

OF REAL AND APPARENT DEATH.

[Continued from p. 182.]

Having thus considered the value of the tests of respiration, we shall proceed to appreciate those which have been considered as furnishing no less certain indications of death. The absence of the circulation, the impossibility of feeling the pulsations of the heart and arteries, have been regarded as infallible means of deciding whether the individual be dead; but it is proved beyond all doubt, that a person may live for several hours, without its being possible to perceive the slightest movement in the parts just mentioned. It has been thought, also, says Orfila, that an individual was dead when he was cold, and that he still lived if the warmth of the body was preserved: there is, perhaps, no sign of so little value;—the drowned, who may be recalled to life, are usually very cold; whilst in cases of apoplexy, and some other fatal diseases, a certain degree of warmth is preserved even for a long period after death. Stiffness of the body is another sign of death, upon which great reliance has been placed; but, as it sometimes happens that it exists during life, it becomes necessary to point out the difference between the stiffness of death, and that which occurs during life in certain diseases. For the following observations upon this subject we acknowledge ourselves indebted to the judicious treatise of Orfila.

1. Stiffness may be very considerable in a person who has been frozen, who is not yet dead, and who may even be recalled to life. This stiffness cannot be confounded with that which is the inevitable result of death, because it is known that

the body has been exposed to the action of severe cold, and, above all, because it is very general. In fact, the skin, breasts, the belly, and all the organs, may possess the same rigidity as the muscles; a circumstance not observable in cadaverous stiffness, in which the muscles alone present any degree of resistance: besides, when the skin of a frozen person is depressed, by pressing forcibly upon it with the finger, a hollow is produced, which is a long time in disappearing. When the position of a frozen limb is changed, a little noise is heard, caused by the rupture of particles of ice contained in the displaced part.

2. The stiffness to which the late M. Nysten has given the name of *convulsive*, and which sometimes manifests itself in violent nervous diseases, may be easily distinguished from *cadaverous* stiffness. When a limb is stiff in consequence of convulsions, &c. the greatest difficulty is experienced in changing its direction, and, when left, it immediately resumes its former position: it is not the same in stiffness from death, —the limb, the direction of which has been changed, does not return to its former position.

3. The stiffness which occurs in certain forms of syncope can never be confounded with cadaverous stiffness; for, in the former case, the stiffness takes place immediately after the commencement of the disease, and the trunk preserves a degree of warmth: whereas, the cadaverous stiffness is not observed until some time after death, and when the heat of the body is no longer evident to the senses.

If, from a cause which it is not always possible to foresee, the individual, who has been thought dead for a long time, be cold and *flexible*, instead of offering a certain degree of stiffness, and at the same time if no evidence of putrefaction has as yet displayed itself, the body ought not to be buried hastily. "Satius est adhiberi millies nimiam diligentiam, quam semel omitti necessariam."

The cadaverous state of the face, of which Hippocrates has given the following description, has been regarded as a sign of real death:— The forehead wrinkled and dry; the eye sunken; the nose pointed, and bordered with a violet or black circle; the temples sunken, hollow, and retired; the ears sticking up; the lips hanging down; the cheeks sunken; the chin wrinkled and hard; the colour of the skin leaden or violet; the hairs of the nose and eyelashes sprinkled with a kind of yellowish white dust. It must be admitted that such signs, if taken separately, are of no value, since they are sometimes observed in patients twenty-four or forty-eight hours before death; while, on the other hand, they are often absent in cases of sudden dissolution.

The softness, dimness, and, above all, the flaccidity of the globe of the eye, have been considered as very unequivocal in their indication. Professor Louis has offered some remarks upon this subject worthy our notice: he says, that, in the dead, the transparent cornea is commonly covered with a thin slimy membrane, which breaks in pieces when touched, and is easily removed by wiping the cornea: but he remarks, that some appearance of it takes place in the eyes of the dying, and also allows that it may be the result of disease. So much for the value of this sign. The one which follows appears to us no less exceptionable. In a few hours after death, adds this author, the eyes become soft and flabby, an effect not to be

produced under any circumstances in the living body: we join in this opinion; but how often does it happen that the globe of the eye undergoes no alteration in form until the putrefactive process has been fully established?—*(Extract from "Medical Jurisprudence.")*

Of the Physiological Causes, and Phenomena of Sudden Death.—It has been asserted by Bichat, that the immediate cause of death, when it takes place suddenly, must be the cessation of the functions of the heart, brain, or lungs; although it is sometimes difficult to determine which of these organs is the first to fail in its action. This may be well exemplified by the poisonous operation of arsenic upon the animal economy, which, when introduced into the circulating system, will, according to the valuable experiments of Mr. Brodie, occasion stupor and paralysis, a feeble and intermitting contraction of the heart, and slow and laborious respiration: but it is found that, in some cases, one order of symptoms will predominate, and be the first to display themselves, whilst in others the very contrary will obtain, without, perhaps, our being able to assign the immediate cause of such deviations. There are, moreover, cases of sudden death, in which the principle of animation would seem to be at once annihilated in every part of the animal machine, and when every organ appears to be simultaneously affected, as in that occasioned by the agency of intense cold, and sometimes, for it is not in every instance, by that of lightning or electricity. Still, as a general proposition, the aphorism of Bichat must be admitted; and we shall proceed to investigate the subject of sudden death, as connected with medico-judicial inquiry, upon principles deduced from the enlightened views of this distinguished philosopher.

To the able and satisfactory researches of our English physiologist, Mr. Brodie, we are also greatly indebted for a correct notion of the nature and order of succession, of those events by which life is quickly extinguished. His attention was, many years ago, directed to one important branch of this subject,—to the investigation of that series of changes produced on living bodies, by the operation of poisons; the results of which were published in the Philosophical Transactions. Since that period, he has diligently pursued the subject in its more extensive ramifications; and in his Lectures, delivered from the anatomical chair of the College of Surgeons, during the last year, he presented a condensed and philosophical history of the phenomena of death in general, in which he elucidated many leading points that were before obscure, established several propositions that have long been considered doubtful, and rejected a mass of popular error, which, under the sanction of authority, has continued to retard our inquiries, and to embarrass and misguide our practice. The author of the present section of this work has to acknowledge the kindness and liberality by which he is enabled to avail himself of these luminous researches, having been furnished, by his friend Mr. Brodie, with the manuscript notes from which the lectures were delivered.

The organs more immediately necessary to life, are — the heart, which conveys to every part of the body that fluid, without a constant supply and change of which vitality must be speedily exhausted; and the lungs, by whose functions this essential fluid undergoes those un-

known changes, from the action of the atmosphere, which adapt it for the performance of the important duties to which we have alluded.

In conformity with these views, the functions of the heart, and their connection with those of the lungs and brain, very naturally present themselves as the first objects of physiological inquiry; and there is certainly no discovery in modern times more interesting in its relations, and, at the same time, so useful in practical application, as that which has determined the nature of the connections between the functions of respiration and the motions of the heart; and shown why the cessation of the former should occasion the destruction of the latter. The existence of this mysterious connection constituted a subject of interest and inquiry in the more remote ages, and it will not be unprofitable to take a review of the different theories which have been proposed for its explanation. Until the celebrated experiment of Hook, it was supposed that the heart's motion was maintained by the alternate contraction and dilatation of the lungs, in the act of breathing; but the extraordinary philosopher above-mentioned, decided this point by exposing the thorax of a dog, and separating the pleura extensively from the external surface of the lungs: and then, by means of a pair of double bellows, keeping up a constant stream of air through the air-cells. By this contrivance, respiration was duly performed, while the lungs remained motionless, and yet it was found that the vigour of the heart's action was not in the least impaired: whereas, if the theory which Hook undertook to refute had been founded in truth, the heart, under such circumstances, must necessarily have become quiescent. Mr. Hunter supposed the existence of a sympathy, or association, between the motions of the heart and lungs; and the same opinion appears to have been entertained by Dr. Currie. Dr. Darwin deduced the existence of this immediate connection from that general law of the animal economy, by which motions that are frequently repeated in succession acquire the power of recurring in the same order, independently of the original exciting cause: "it is thus, (says he,) that, by the stimulus of the blood in the right chamber of the heart, the lungs are induced to expand themselves." Dr. Bostock, however, has very satisfactorily opposed this hypothesis, by observing that, in the fœtus, the heart commences its contractions immediately upon its formation, while the lungs remain perfectly at rest; and that, when the animal leaves the uterus, the motion of the lungs commences; but the periods of the contraction of the diaphragm bear no determinate ratio to those of the systole of the heart.

It was long supposed that the cessation of respiration occasioned that of the heart's motion, in consequence of the black blood not having sufficient power to stimulate its fibres; but does not the right side of the heart, which under all circumstances contains de-oxygenated blood, contract with a vigour equal to that of the left? It was reserved for Bichat to offer a true explanation of this phenomenon: he has very justly stated, that, in consequence of the suspension of the respiratory function, the coronary vessels, by which the muscular structure of the heart is supplied, are compelled to carry black instead of scarlet blood; a fact which, in itself, is quite adequate to explain the cause of the heart ceasing to contract; for the irritability of this,

like that of every other muscle, can be alone maintained by duly oxygenized blood. But it remains to be shown how the functions of the brain and the nervous system stand related to those of the heart and lungs. Although the agency of nervous influence is necessarily involved in impenetrable obscurity, yet we shall not have much difficulty in proving, that *the brain is immediately necessary to life, only because the muscles of respiration owe their action to its influence.* M. Lallemand has published the history of a fœtus, in which the brain and spinal marrow were equally deficient; notwithstanding which, it even exceeded the usual size, the heart was perfect, and it was evident that the circulation had been properly performed: no sooner, however, was the monster born than it perished, because the diaphragm and other muscles of respiration were unable to perform their functions without the aid of nervous excitement; no air was, therefore, inhaled into the lungs, and in a few minutes the heart ceased to contract, from the deficient supply of oxygenized blood. If the phrenic nerves of a quadruped be divided, the motion of the diaphragm ceases, and the animal breathes by the motion of the ribs alone, panting and respiring with difficulty and distress. If the spinal marrow be divided below the origin of the phrenic nerves in the lower part of the neck, no interruption is given to the transmission of the nervous influence to the diaphragm, but the ribs now become motionless, and respiration is performed by the diaphragm only. If the spinal marrow be divided in the upper part of the neck, above the origin of the phrenic nerves, the nervous influence is neither transmitted to the diaphragm, nor to the muscles which produce the motion of the ribs, and respiration is entirely suspended. Under these circumstances, the heart continues to contract for some minutes, after which it ceases, as there is no supply of blood which has received the influence of the air; and, consequently, the muscular fibres of the heart lose their excitability, and the blood is no longer circulated. If, however, the lungs be artificially inflated before the action of the heart has ceased, its motions are continued. The experiment may, also, be very satisfactorily varied in the following manner:—Apply a ligature to the carotid arteries in the neck, so as to prevent the occurrence of hemorrhage, and then decapitate the animal: if respiration be now artificially maintained, the heart will suffer no disturbance in its motions, but the circulation will be preserved for several hours in the body of the decapitated animal. In farther illustration of this view of the subject, Mr. Brodie observes, that many reptiles, which are capable of respiring by means of the skin, will survive the loss of the brain for so long a period, that the wound made by decapitation becomes cicatrized, and death only takes place at last in consequence of inanition. *(Manuscript notes.)*

In farther illustration of these views, let us observe the mode in which death takes place in apoplexy, or in cases of pressure on the brain, whether occasioned by a depressed portion of bone, or by blood extravasated within the cranium. At first the patient is insensible to all external impressions, but the breathing is not affected; after an interval, however, the respiration becomes difficult and laborious, and the purple hue of the lips and cheeks, from the sub-cutaneous vessels, demonstrates that the blood is imperfectly

oxygenized. The arterial action becomes more slow, in proportion only as the respiration is more difficult; and the pulse may even be distinguished at the wrist after the breathing has altogether ceased. Under such circumstances, it is obvious that life might be protracted for several hours by artificial inflation of the lungs; but, as no ultimate benefit could be derived from such an operation, its expediency may be fairly questioned.

Enough has been said to show that the brain is not *immediately* necessary to the action of the heart; but Mr. Brodie has very justly observed, that the general proposition thus established must not lead us to the conclusion, that the heart is therefore incapable of being affected by violent impressions on the nervous system. The fact is quite otherwise; for, although the brain may be removed, and the circulation be nevertheless maintained by artificial respiration, yet an injury inflicted on the brain, of another kind, may be followed by those immediately fatal consequences, which decapitation itself would not produce. Dr. Wilson Philip states, that if the brain be violently crushed, the action of the heart is immediately stopped; and the fact is too notorious to be questioned, that a blow on the head is frequently succeeded by syncope. There are but few circumstances, says Mr. Brodie, in the history of the animal economy, which appears more remarkable than this fact, that *an injury of a part which is not immediately essential to the heart's action, should, nevertheless, under certain circumstances, have the effect of occasioning its immediate cessation.*

The late researches of Le Gallois may, perhaps, receive further elucidation from the above proposition. This physiologist has stated that, if a wire be introduced into the theca vertebralis, and be moved upward and downward, so as to destroy the texture of the spinal marrow, the action of the heart presently ceases; and he from thence advances to the conclusion, not only that the spinal marrow is necessary to the heart's action, but that every part of the animal body derives its vital properties from it. From what I have observed, says Mr. Brodie, *(manuscript notes,)* in the repetition of the foregoing experiment, I should infer that the fact is correctly stated, as far as it relates to warm-blooded animals, but the conclusions are undoubtedly premature; and the history of the fœtus, as related by Lallemand, in which, notwithstanding the absence of the brain and spinal marrow, the child was even larger than usual, the heart perfect, and it was manifest that the circulation had been duly performed, is in direct opposition to such a theory. We must here agree with Mr. Brodie, that such phenomena are quite incompatible with the doctrine in which the spinal marrow is supposed to be directly necessary to the existence of vitality in the system generally, and to the action of the heart in particular; and that we must, therefore, look for some other explanation of the effects which are produced by the destruction of the spinal marrow in warm-blooded quadrupeds. May they not be explained by supposing them to be the effect of the shock which must necessarily attend the removal of the spinal marrow, which can never be effected with the facility which attends decapitation?

We have deemed it necessary to offer these few remarks upon the relations which subsist between the functious of the heart, lungs, and

brain, inasmuch as the propositions which have been thus established respecting them can alone lead to a correct pathology of those diseases by which life is suddenly extinguished, or suggest a rational and effectual plan of treatment in cases of suspended animation.—*Med. Jurisprudence.*

Speculations and Enquiries respecting the Action and Nature of certain Compounds of Sulphur.—The cases in which sulphur decomposes water and combines with one or both of its elements, may, perhaps, be reduced to three:—

1. The action of a metallic sulphuret.
2. The action of a metallic oxide and sulphur.
3. The action of a metallic oxide and a metallic sulphuret.

The simplest case is that of putting sulphuret of potassium into water. In this case water is decomposed, the oxygen forming potash with potassium, and the hydrogen hydrosulphuric acid with the sulphur; and supposing that an atom of sulphuret of potassium is decomposed, there must of course be formed an atom of hydrosulphate of potash, consisting of

1 atom hydrosulphuric acid (1+16)..	= 17
1 atom potash (8+40).....	= 48
	65

When potash and sulphur are boiled together, the action is of course more complicated. Water must be decomposed, for an acid added to the solution evolves hydrosulphuric acid, and sulphur is precipitated. Now hydrosulphat of potash is not decomposed by an acid so as to precipate sulphur, and moreover, although water is decomposed, what becomes of its oxygen? Does the following take place?

1 atom hydrogen.....	= 1
1 atom sulphur.....	= 16
Hydrosulphuric acid.....	17

And does the atom of oxygen unite another atom of sulphur to form hyposulphurous acid? Thus

1 atom oxygen.....	8
1 atom sulphur.....	16
Hyposulphurous acid.....	24

This appears to be probable, for it will readily be granted that oxygen is not evolved from the decomposition of the water, while its hydrogen is forming hydrosulphuric acid. The oxygen cannot unite with potash, for that is already an oxide, and it cannot convert it into peroxide, for that is decomposed by water. As then, in this case, both the elements of the water appear necessarily to combine with the sulphur, there are, perhaps, formed hydrosulphate and hyposulphite of potash. But here again a difficulty occurs; when hydrosulphate and hyposulphite of potash are treated with an acid, although hydrosulphuric acid must be given out by the decomposition of the former salt, neither of them, I believe, yields sulphur, which is well known to be precipitated from the solution of sulphur in potash. Is there a third compound formed, which is merely a solution of sulphur in potash, and in which no water is decomposed? Is there in fact formed a real sulphuret of potash? This appears to me probable; in which case we should have, by dissolving sulphur in a solution of potash,

Hydrosulphate of potash,
Hydrosulphate of potsah,
Sulphuret of potash.

Without the existence of the last compound, I do not see how sulphur could be precipitated by an acid; and unless the first existed, hydrosulphuric acid could not be evolved by the same means; and it seems requisite to suppose the existence of

the second, in order to dispose of the oxygen.

This subject will, perhaps, admit of illustration by observing what happens when chlorine is passed into an aqueous solution of potash. The water is decomposed, its hydrogen combines with chlorine to form hydrochloric, and its oxygen with a portion of chlorine to form chloric acid; this then is perfectly analogous to what I have supposed to occur with sulphur. It might, indeed, be imagined, that the sulphur is converted into sulphuric acid instead of hyposulphurous; but this does not happen, for the solution when decomposed by muriatic acid affords no traces of the sulphuric on the addition of a barytic salt.

Whether a compound of chlorine and potash exists, I know not; but chloruret of lime is a well-known compound, and if chlorate, and consequently hydrochlorate of lime can also be formed by the action of chlorine upon water and lime, then the parallel between the actions of chlorine and sulphur will be complete; we should have hydrosulphate, hyposulphite, and chloruret of lime.

When sulphuret of antimony is boiled in solution of potash, what happens? We have sulphur, a metallic oxide, and a metal, operating upon and decomposing water; and when soda is used instead of potash (which is the same for the argument,) a crystallized salt is obtained, which consists of hydrosulphuric acid, soda, and oxide of antimony. When sulphuric acid is added to this solution, hydrosulphuric acid is given out, and sulphate of soda formed, by the decomposition of the hydrosulphate of soda; but the hydrosulphate of antimony not being decomposed by the sulphuric acid and (unless when it forms a double salt), being insoluble, it is precipitated of an orange colour, consisting, there is no doubt, of hydrosulphuric acid and oxide of antimony. Now it it is by no means easy to discover what happens in this case. Let us suppose we are operating upon an atom each of potash, antimony, and sulphur; if only 1 atom of water be decomposed, then protoxide of antimony, as we have reason to suppose is the case, would be formed by the union of 44 of antimony with 8 of oxygen. We have then 16 of sulphur to combine with 1 of hydrogen to form 17 = 1 atom hydrosulphuric acid; but this would be sufficient only to saturate either 48 of potash = 1 atom, or 52 of protoxide of antimony = 1 atom. This is a difficulty; but as a double salt is evidently formed, may we not suppose that the metallic oxides, oxide of potassium, and oxide of antimony, form sub-bisalts with the sulphuret ted hydrogen? or so to speak, that they each take half an atom? We should then have a salt consisting o

1 atom hydrosulphuric acid = 17
1 atom potash ..... = 48
1 atom oxide of antimony = 52

It can hardly be admitted tha more than one atom of water is de composed; for in that case we shoul increase the difficulty; since no only would there be 2 atoms of hy drogen to combine with 1 of sul phur; but either hyposulphurou acid, or peroxide of antimony, mus be formed at the same time: nov for the former the sulphur is evi dently insufficient, and peroxide lose oxygen by exposure to the ac tion of hydrosulphuric acid.

The action of hydrosulphuric aci upon metallic oxides is reducibl also to three cases. First, whe they combine without either bein decomposed, as when potash unite with it to form an hydrosulphate

In this case neither the hydrosulphuric acid yields its hydrogen, nor does the oxide give up its oxygen. The same appears to be the case with oxide of antimony, excepting that the compound is insoluble in water. The second case is when the hydrosulphuric acid is decomposed, but without precipitating the metal from solution. This happens when sulphuretted hydrogen is passed into a solution of peroxide of iron. The excess of oxygen combines with the hydrogen of the hydrosulphuric acid, the peroxide becomes protoxide, and sulphur is precipitated. The third case is that of adding hydrosulphuric acid to solution of lead, copper, &c. In these cases water appears to be formed by the union of the hydrogen of the hydrosulphuric acid, with the oxyen of the metallic oxide, and the consequence is, that a metallic sulphuret is precipitated.

These hypothetical ideas are thrown out in the hope that they may lead to experiments for the purpose of elucidating an important but yet obscure branch of chemical science; and it may be observed, if these speculations are just, that the discovery of hyposulphurous acid is one of considerable importance in elucidating this subject. —(*Ann. Philosoph.*)

Connexion of Phosphorescence with Electricity.—The sulphate of quina was shown by M. Callaud d'Annecy, some time since, to become highly phosphorescent when rubbed at a temperature of 212°. MM. Dumas and Pelletier have ascertained that it becomes highly negatively electrical when rubbed on woollen cloth, and hence were led to the verification of a suspicion they had long entertained that phosphorescence was an electrical phenomenon. About two or three ounces of sulphate of quina were introduced into a glass flask, and heated for half an hour in a water bath at 212° F., it then by friction gave out a sufficiently intense light. The flask was closed by a cork, through which passed a wire pointed at the inner extremity, and terminated by a ball at the external end; on approaching this ball, two or three times to the knob of a voltaic electrometer furnished with its condenser, having taken care to shake the flask before each contact, the leaves became so electrical as to diverge as much as the instrument would admit of, the electricity being constantly positive.

The sulphate of cinchonia, which is phosphorescent like the sulphate of quina, though less so, also became electrical in the same manner. Its electricity, though of the same kind, was not so strong as that of the preparation of quina. —(*Ann. de Chim.* xxiv. 171.)

Preparation of Oxide of Nickel. By M. Berthier.—Speiss, or impure nickel, is to be reduced to fine powder, and roasted till it gives off no further vapours of arsenic, the heat being at first moderate to prevent fusion, and then increased. Metallic iron in the state of filings or nails is to be added in a quantity which ought previously to be determined, and the whole dissolved in boiling nitro-muriatic acid, so much nitric acid being used that no protoxide of iron remain in the solution; evaporate to dryness and re-dissolve in water, when a large quantity of arseniate of iron will be left. Add to the solutions successive portions of carbonate of soda until a greenish precipitate appears, at which time all the arsenic and iron will be separated, and part of the copper; the rest of the copper may be separated

by sulphuretted hydrogen, and the clear solution thus obtained, when boiled with sub-carbonate of soda, yields the carbonate of nickel.

Thus obtained, the carbonate of nickel contains a little cobalt; to separate the latter, the precipitate, as obtained above by boiling with sub-carbonate of soda, is to be well washed and diffused whilst moist in water, and a current of chlorine passed into it until in excess: the excess of chlorine is to be allowed to dissipate and the solution filtered; it now contains not the smallest trace of cobalt, that remaining as a hydrated peroxide, with a certain portion of nickel in the same state. If in the mixed carbonate of nickel and cobalt, the latter is in excess; the residue, after the action of the chlorine, is pure hydrate of cobalt, and the solution contains the nickel with a small quantity of cobalt.—(*Ann. de Chim.* xxv. 95.)

Improvement in Clocks. — The public papers, sometime since, contained information of an improvement in timekeepers, invented by Mr. Dyer, of this city. We hope hereafter to furnish our readers with a more particular account of this invention than is contained in the following brief notice:—

The most important feature in this improvement consists in the application of the *spiral teeth* to the wheel-work of clocks, and in this the pinion is reduced to a single tooth. By this happy idea, Mr. Dyer has greatly reduced the wheel-work necessary to a clock, and the friction is diminished in a still greater degree; as all who are acquainted with the spiral gearing are aware that the point of contact, between two wheels, with spiral-teeth, always coincides with the line of centres. Mr. Dyer has also contrived a very ingenious method of suspending the pendulum, in place of the spring, or knife-edge suspension. This method is to hang the mass constituting the pendulum to a plane, the under surface of which rolls at every oscillation upon a fixed convex body. He proposes to give such a curve to the convex surface, that the pendulum, vibrating, shall be accelerated at every moment of its descent by a force proportional to the arch between it and the lowest point; this condition being required to render the vibrations isochronal. Mr. Dyer has not yet demonstrated the curve necessary to obtain this result; but from the constant variation of the centre of oscillation, in a pendulum suspended in the above method, the cycloid is not the curve required. He is aware that his suspension cannot be executed with such accuracy as to render the vibrations perfectly isochronal; but he may undoubtedly obtain a near approximation to a curve which would render them so.—(*Boston Journal of Philosophy and the Arts, May*, 1824.)

(*From the Transactions of the Associated Apothecaries.*)

A Case of Cut Throat successfully treated.—By C. T. Haden, &c. &c. —A female, aged 42, in an attempt to commit suicide, divided the thyroid cartilage and adjacent parts, so as to lay open the larynx, and exposed to view the posterior surface of the pharynx. The wound extended from one sternocleido-mastoideus muscle to the other. After two hours were allowed to elapse, order to permit hæmorrhage and irritation to subside, two ligatures, which were introduced shortly before, were drawn so that the lips of the wound were lightly but accu-

rately closed; two compresses of lint were placed diagonally with one across the bottom of them. "Slips of sticking-plaster were placed in like manner diagonally and across, so as to keep the compresses on, and thus to support the lower lip of the wound in its closed state." Well adapted bandages were afterwards applied, the patient placed in bed in a siting position, or at least with her body somewhat reclined, but her head a little bent forwards; and an attendant was placed by her side. On the second day the wound was close, and free from irritation. The patient recovered progressively, and in a few days was quite well.

One of the most important parts of the general management of the case was delaying to close the wound until the first great irritation and the hæmorrhage had subsided. Some very interesting reflections are appended to this instructive case.

We abstract the following note, as a warning to those who entertain an insufficient idea of the responsibility of their profession. We know that there are many such;—we have seen many glaring acts not only of ignorance but of gross neglect—we have heard of many more. Yet when a writer performs his duty, and endeavours to expose, and thereby to reform what is a disgrace to the profession of which he is a member, he is liable to be railed at as being illiberal, envious, &c., by all those who are conscious of their own ignorance and delinquencies.

"A gentleman cut his throat in the night. The wound was very large; but, as the hæmorrhage had ceased, the two attendant Surgeons stitched up the wound, and left their patient. At an early hour the next morning the man was dead. The writer witnessed the dissection; and he considered that death took place in consequence of the immense sanguineous engorgement of the cellular membrane surrounding the wound. Secondary hæmorrhage had of course taken place; and as the careful closing of the wound had prevented the escape of the blood, the latter had been so forcibly injected into the surrounding parts, that the whole mass, on being divided, put on the appearance of a clot of blood. In this case the wound had not penetrated either larynx or trachea."

Some Observations on the Utility of Opium in certain Inflammatory Disorders. By John Armstrong, M. D., &c.—Dr. Armstrong's observations refer chiefly to the treatment of abdominal inflammations, and more particularly to inflammations of the digestive canal. In these he recommends the exhibition of full doses of opium to be resorted to after blood-letting has been employed with a prudent decision. The practice is one of which we have had considerable experience both in this climate and between the tropics; and we are perfectly satisfied of its propriety and of its great efficacy, when decidedly and judiciously prescribed. The practice is, however, by no means novel; indeed, Dr. Armstrong does not pretend that it is. We reget that our limits prevent us from giving an analysis of this paper; we recommend it to the perusal of our readers.

Case of Blighted Ovum. By J. Hayes, Member of the Royal College of Surgeons, &c.—Mr. Hayes was called to a female in the fifth month of her fourth pregnancy, who complained of slight hæmorrhage and other symptoms threatening abortion. She was relieved by the treatment which was enjoined. At the expiration of eighteen weeks from this time she was delivered of a fine healthy male child: the placenta was expelled by the natural efforts about half an hour afterwards; and the womb seemed to have con-

tracted to the usual size. "In less than an hour after the expulsion of the placenta the patient complained of severe pain, and a singular fulness in the passage." On introducing his finger into the vagina, Mr. Hayes found a blighted fœtus, apparently of four months. It was loose in its texture; flattened, as if by pressure; of a dark unhealthy hue, and extremely fœtid. The funis was very long, and excessively tender. The placenta was much withered, and reduced to a pulpy mass. The mother and child both did well.

PHILOSOPHICAL SOCIETIES, &c.

Royal Society, *May* 27.—The reading of Mr. Abrahams' paper on Magnetism was concluded; and a paper was read, "On the Direction of the Eyes in Portrait Painting; by W. H. Wollaston, M.D. V. P. R. S.

June 3.— —— Lemon, Esq. was admitted a Fellow of the Society; the name of Charles Macintosh, Esq. ordered to be inserted in its printed lists; and a paper was read, "On the Generation of Fishes; by J. L. Prevost, M. D."

The Society then adjourned to June 17, in consequence of the ensuing holidays.

June 17.— —— Edgeworth, Esq. was admitted a Fellow of the Society, the name of Major Charles Hamilton Smith ordered to be inserted in its printed lists; and the following papers were read, several of them in an abridged form.

On the Organs of Generation of the Axolotl, and of other Protei; by Sir E. Home, Bart. V. P. R. S.

On the Effects of Temperature on Magnetism and on the diurnal Variation of the Needle; by S. H. Christie, Esq. M. A.: communicated by the President.

On the Preservation of the Copper Sheathing of Ships, and on some Chemical Facts connected with it; by the President.

On the Application of Dœbereiner's new Discovery to Eudiometry: by William Henry, M. D. F. R. S.

The Society then adjourned, over the long vacation, to meet again on the 18th of November next.

Linnean Society. *May* 4.—M. G. St. Hilaire was elected a Foreign Member.

A notice from Mr. Wood was read respecting the Golden Oriole, *Oriolus Galbula*, shot on the 26th of April, flying in company with some Blackbirds, at Aldershot in Hampshire.

The reading was continued of Mr. Vigors's papers on the Natural Affinities of Birds; and of the Catalogue of Norfolk and Suffolk Birds, by the Rev. Messrs. Sheppard and Whitear.

May 24.—On this day, being the birthday of Linnæus, the Anniversary of the Society was held at one o'clock, in conformity with the Charter, the Right Rev. the Lord Bishop of Carlisle, Vice-President, in the Chair.

The following gentlemen were re-elected Officers:—Sir James Edward Smith, *President*; Edward Forster, Esq. *Treasurer*; Alexander Mac Leay, Esq. *Secretary*; Mr. Richard Taylor, *Assistant-Secretary*.

The following were elected to be of the Council for the ensuing year;—Edward Barnard, Esq.; H. T. Colebrooke, Esq.; Major-General T. Hardwicke; Daniel Moore, Esq.; and Philip B. Webb, Esq.

An extensive and interesting series of the various species of Rhubarb, from Chelsea Garden, was exhibited by Mr. Anderson.

The Anniversary Dinner of the Society took place at Freemasons' Tavern, and a considerable number of the Fellows, including many from distant parts of the kingdom, participated in the pleasure of this meeting, which was alloyed only by the absence, owing to indisposition, of their highly esteemed President, whose excellent qualities, great attainments, and invaluable labours for the promotion of science, have long endeared him to those who know him, and especially to the lovers of Natural History. The chair was filled on this occasion by the venerable Prelate, who from the first foundation of the Society has been one of its most zealous supporters.

June 1.—The reading of Mr. Vigors's paper was concluded; and that of Messrs. Sheppard and Whitear's Catalogue continued.

June 15.—The meeting of this evening, which was an extremely numerous one, was honoured by the presence of His Royal Highness the Prince of Saxe-Cobourg, and several other personages of distinction.

The reading was commenced of a paper, "On the Structure of the Tunicata; by W. S. Mac Leay, Esq. M. A. F. L. S." and the Society then adjourned, over the sum-

mer recess, to meet again on the 2d of November next.

Astronomical Society. *May* 14.—The whole of this sitting of the Society was occupied by the reading of the conclusion of Mr. Baily's paper "On the Method of determining the Difference of Meridians, by the Culmination of the Moon;" this paper having been commenced at the last meeting in April.

Geological Society. *May* 21.—The reading of the paper "On the Geology of the Ponza Islands in the Mediterranean; by George Poulett Scrope, Esq. M.G.S." was concluded.

A paper was read, entitled, "Notes accompanying Specimens collected on a Journey through Part of Persia and the Russian Tartaries; by James B. Fraser, Esq. M.G.S."

June 4.—A paper was read, entitled, "Description accompanying a Collection of Specimens made on a Journey through the Province of Khorosan, in Persia; by J. B. Fraser, Esq. M.G.S."

June 18.—A paper was read, entitled, "Notes on Part of the opposite Coasts of the English Channel, from Deal to Brighton, and from Calais to Treport; by Wm. Henry Fitton, M.D. M.G.S."

MELANGE.

A rich Englishman, (the Paris papers say,) has commissioned the Sculptor, Flatters, to execute a marble bust of Lord Byron; and, in order that the likeness may be more perfect, has obtained from Greece a plaster cast moulded from the celebrated poet. We have not heard of any such cast being taken; and it is probably a mere puff, to recommend the work.

David's last great picture, of Mars disarmed by Venus and the Graces, is now exhibiting in Paris, at two francs entrance.

M. Francis T. Fabre, of Montpellier, has presented to the Medicean Laurentian library at Florence all the MSS. of Alfieri, and all the printed books in which there are MS. remarks by that illustrious writer. M. Fabre has also presented to the Gallery two portraits on canvass, (three-quarter size) painted by himself, one of Alfieri, the other of the Countess of Albany, to be preserved in the Saloon of the French School. On the back of each picture is pasted a Sonnet, composed by Alfieri, and in his own hand-writing.

The celebrated Italian naturalist Giovanni Brocchi writes from Balbec in Syria, that since his return from Nubia, he has stopped in that city, to direct the working of a coal-mine, which has been discovered near Mount Lebanon. His Herbarium is rich in rare plants; and his mineralogical, or rather geological collection, is no less considerable. On Lebanon and Antilebanon, however, he has not found any rare plants: the vegetation seems to differ but little from that of Sicily and Southern Calabria. He had travelled constantly by land, and his journey from Nubia to Syria was very fortunate.

We lately mentioned the new mode of extinguishing fire in chimneys by throwing sulphur on the fire below, which has been tried at Rome. Recent experiments have fully confirmed the valuable result of this method, which is, in fact, perfectly consonant with the received theory of combustion. Only, the person using it must take care not to throw on too large a quantity of sulphur, otherwise he might be exposed to inhale the noxious effluvia, which destroy animal life on the same principle that they extinguish the fire.—*Lit. Gaz.*

The productions of art, models, &c. for which the rewards of this year were adjuged by the Society of Arts, Manufactures, &c. have, since the Anniversary, been exhibited in the Rooms of the Society, in the Adelphi, and attracted many of the curious and interested. Great pains, we understand, are taken to render these distinctions pure; and certainly, if we may judge from many of the specimens shown, they have been amply merited.

Several distressing instances of hydrophobia have recently occurred in various parts of England. Two, of deaths from bites of cats.

Longevity.—A man died on the 13th ult. at Warempage (in Flanders) at the great age of 119. He was a soldier in the seven years war; and, with the exception of sight, retained all his faculties to the last.

Rome, 21st *March*, 1824.—The excavations which the Princess Doria caused to be made last year on the estate *La Bottaccia*, the native country of the Antonines, had been too successful not to inspire a wish of renewing them this year. They have already led to the discovery of two magnificent Urns of white marble. One of them, which is of an elliptical form, is covered with bas reliefs, representing the contest between Apollo and Marsyas, and the Judgment of Midas. The second urn, on which a sleeping child is sculptured, probably contained the ashes of this child. Since the discovery of these urns, a very

beautiful Mosaic Pavement has been uncovered.

Towards the beginning of this year, some workmen employed in repairing the road close to the tomb of Cecilia Metella, in the Appian Way, found, a very little below the surface, the trunk of a statue in armour, of indifferent workmanship; and near to it, also on the road between the tomb and the fortifications of Capo di Bove, three large gently rounded fragments, with a simple cornice running over them, with the following inscription beautifully carved in large characters:

T.CRVST	IDIVS. T. F. FAB. BRI	
PRAEP. E	QVIT. VIXIT. ANN. XI.	X
EX.TESTA	MENTO. PRO. PARTE DI	IDIA

The entire length of the inscription is 9 feet 3½ inches; the breadth of the stone, 5 feet 8 inches. The height of the letters is, in the first line, 5 inches 4 lines; in the second, 4 inches 5 lines; in the third, 4 inches 1 line. The segment of the circle to which the fragment belongs, is of the same magnitude as that of the tomb of Cecilia Metella; and the sight of this fragment found so near it, inclines us to imagine that a monument of T. Crustidius, resembling the other in magnitude, stood opposite to it. There has been found also, near the same spot, a large piece of marble ornamented with foliage of beautiful workmanship, 4 feet 2 inches high, and 2 feet 6 inches broad.

The King's Evil.—In reviewing "The Witch-Finder," we noticed the descriptions given of the ceremony of *touching* for the king's evil. The following proclamation, issued in the reign of Charles I. April 22, 1634, will perhaps afford some gratification to the curious, who will not fail to mark the gravity with which that practice is mentioned, which we now laugh at as one of the most ridiculous of "vulgar errors:"

By the King.—A Proclamation appointing the time when his Majestie's subjects may approach to the Court for cure of the disease called the King's Euill;

Whereas, by the grace and blessing of Almighty God, the Kings and Queens of this Realme, by many ages past, have had the happinesse, by their sacred touch, to cure those who are afflicted with the disease called the King's Evill; and his now most excellent Majesty, in no lesse measure than any of his Royall Progenitors, hath had blessed successe therein; and, in his most gracious and pious disposition, is as ready and willing as any King or Queene of this Realme ever was, in any thing to relieve the distresses and necessities of his good subjects; yet in his princely wisdome, foreseeing that in this (as in all things,) order is to be observed, and fit times are necessary to be appointed for performing this great worke of charity; and taking into his Royall consideration the great inconveniences which may happen, both in respect of the temper of the season, and in respect of contagion, which may happen in this neere accesse to his Majestie's sacred Person, when the season of the yeare is growne warm; Doth hereby publish and declare his Royal pleasure to be, and also will and command that from the time of publishing this proclamation, no person or persons whatsoever do attempt or presume to repair to his Majesty's Royal Court, to be healed of that disease, before the feast of All Souls now next coming; And to the end that all his loving subjects may the better take notice of this his Majestie's pleasure and command, his pleasure is, that this proclamation be published and affixed in some fit and open place in every market-town of this realme.—*Lit. Gaz.*

Indian Cholera Morbus in Europe.—Dr. Hufeland has received a letter from a Russian physician, informing him that the cholera of India has made its appearance at Astracan, in the Russian fleet, September, 1823. One sailor exhibited all the symptoms of this terrible disease, and died in eight hours. Of twenty-three others, twelve died in the space of from nine to twenty-six hours. M. Hufeland expects farther details on the subject, which he will publish as soon as he receives them.

Cholera Morbus in Syria.—By M. Moreau de Jonnes.—The cholera morbus which made its appearance, in 1817, in the *Delta* of the Ganges, spread, in 1821, to the shores of the Persian Gulph. In 1822 it extended into Persia, and entered Syria. In the month of June, 1823, it appeared at Antioch, and spread along the coasts of the Mediterranean. It is without foundation, although it has been announced in the public papers, that it has shewn itself in the Isle of Cyprus and in Lower Egypt; but it is not improbable that it may extend into the latter country during the present spring, especially if it reached Damascus before the cold season arrested its ravages. We have not yet heard whether it has entered Alexandretta; but the latest news assert that it has already desolated the shore of the gulph on which that city is situated, and that the terror which it occasions has dispersed the greater part of the population.—*Revue Encyclopédique, Janvier* 1824.

Institution for the Cure of Diseases of the Lungs, at Vienna.—A German physician is about to found at Vienna, in concert with a rich and beneficent capitalist, an esta-

blishment for the treatment of diseases of the lungs. He pretends that these diseases are not incurable, and that he possesses the means of curing them when they have not attained their last stage.—*Ibid.*

Fête held at Ghent commemorative of the Introduction of Vaccination.—On the 8th of January, the Committee of Vaccinaton at Ghent assembled to commemorate the anniversary of the Jennerian discovery, and its introduction into that country by the respectable surgeon M. Demanet. It appears that, notwithstanding the zealous care of this committee, the small-pox has shewn itself in some of the streets in a certain quarter of Ghent: the affixing of an *écriteau*, however, on the infected houses, and other sanitary measures directed by the regency, have produced a good effect. The disease has not extended, and its total disappearance is expected.—*Ibid.*

New Denomination for Croup.—Our Gallic brethren, who seem to take a still greater pleasure than ourselves on the coining of words, have, in a late instance, left us in immeasurable distance behind them. A Monsieur Blaud, in a work entitled "*Nouvelles Recherches sur la Laryngo-Trachéite*," has proposed to denominate that disease by the term *broncho-laryngo-tracheite-mixa-pyoménynggogène!!* a term which may be written, but, we will venture to say, will never be spoken.—*Ibid. Mars* 1824.

Mr. Belzoni.—We regret to learn that this enterprising and amiable man has not left behind him pecuniary resources by any means adequate to the wants of an interesting widow and of his aged parents, who were entirely dependant upon their children for support. The liberality and necessary expenditure of Mr. Belzoni prevented his accumulating any property previous to the exhibition of the Egyptian Tomb, and the publication of his Travels, both of which were for the time very profitable resources; and his subsequent expenditure in presents to African and European authorities, to enable him to prosecute his researches, must have absorbed the greater portion of what he had accumulated. Mr. Belzoni has left a widow, who was long the sharer of his trials and the participator of his pleasures, and to whom his death must prove a blank in nature never to be filled up. Mr. Francis Belzoni, who is a few years younger than his deceased brother, has all his predilection for travelling and the acquisition of scientific knowledge. The invitation given to him, according to the Irish papers, by the Pacha of Egypt, and the encouragement for some time held out by a celebrated antiquary in this country, and also by one of our official residents in Egypt, will probably induce Mr. Francis Belzoni to attempt to follow up the discoveries of his brother.

Erasmus's far-famed Greek Testament on vellum, printed at Basil, 1519, in which edition Erasmus omitted the celebrated verse, in St. John's Epistles, respecting the three heavenly witnesses, was purchased by the Archbishop of Canterbury, for 140*l.* Sir Mark Sykes bought this book in Holland for 30*l.*; there is but one other copy of it known to exist on vellum, and that is in the Cathedral at York. Sir Mark Sykes manifested so ardent a disposition to possess this volume, that previously to his fortunate purchase abroad, he is said to have offered the Archbishop and the Dean and Chapter of York, one thousand guineas for their copy, which they refused. Mr. Thorpe, the bookseller, was the Archbishop of Canterbury's powerful competitor.

Monument to Dr. Baillie.—We understand that a meeting of the subscribers for the intended monument to the memory of this distinguished physician, is to be held at the Freemasons' Tavern, on the 1st of July. We regret exceedingly that our limits will not permit us to do more than express our sincere wish that the object may succeed in a manner deserving alike of the late eminent individual and of the profession, to which he was so long an ornament.

Skeleton of a Mammoth near London.—The entire skeleton of a large mammoth, *i. e.* a fossil elephant of the same species with those which occur in Siberia, and all over Europe, has been very recently discovered near London, at Ilford, in the county of Essex, near Stratford and Bow. It lay buried at the depth of about sixteen feet, in a large quarry of diluvial loam and clay, which is excavated for making bricks. Mr. John Gibson, of Stratford, has been diligently exerting himself in collecting and preserving as much as possible of this skeleton; and a few days since he invited Professor Buckland and Mr. Clift to assist him in disinterring the remainder of the bones which he had purposely left in their natural position in the quarry. These gentlemen found a large tusk, and several of the largest cylindrical bones of the legs; also many ribs and vertebræ, with the smaller bones of the feet and tail lying close upon one another, so that there can be no doubt, that, with those before collected by Mr. Gibson, they had made up an entire skeleton at least fifteen feet high; they were embedded in tenacious clay (which is dug for bricks), being part of the great superficial covering

of diluvial clay, sand, and gravel, which is spread over a large portion of the counties of Essex, Suffolk, and Norfolk, and along the whole east coast of England, at irregular intervals, and is almost every where occasionally discovered to contain similar remains of antediluvian animals to those at Ilford.

Bloomsbury Dispensary.—On Thursday evening, May 20th, the Anniversary Festival of this Institution was celebrated at the Freemasons' Tavern, Great Queen-street, when a numerous and respectable company attended, and partook of a sumptuous entertainment; and, in the absence of Sir C. Hunter, Bart. Stephen Hough, Esq. took the Chair, and was supported by Signor Jose Joachim Ferreiara de Moira, President of the Portuguese Cortes; Signor Carvallo, Ex-Minister of his Faithful Majesty; Signor Fencara Borges, Privy Counsellor, and Member of the Portuguese Cortes; General Don Rammon Romay, and his Aid-de-Camps, General Mendez de Vigo, and several other Foreigners and persons of distinction.

The Secretary's Report stated, that since the commencement of the Institution, in 1801, 42,274 patients have been admitted, and that 6017 patients were visited at their own habitations, and 2240 were admitted during the last year, and there now remain under cure 305 persons.

Several speeches were made in support of the charity, and the company continued until a late hour in the utmost festivity, and were highly entertained by the singing of Fitzwilliam, Jolly, Philips, &c. A handsome subscription was made.

In draining a marsh near Freyenwald, the prow of a ship, in a state of petrifaction, was found. The learned antiquary, Counsellor Ehentrick, conceives it to be Phœnician.

At the Exposition of French Industry, several large Telescopes were exhibited by MM. Lerebours and Cauchoix, constructed with flint-glass, made by M. Guinand of Neuchatel. One made by Lerebours had its object-glass nine inches in diameter, French measure, and its focal length 10½ feet; and another by M. Cauchoix, had the diameter of the object-glass 11 inches, and the focal length 18 feet. We hope that the performance of these telescopes will correspond with their dimensions.

M. Faraday has found, that by the exposure of plate-glass with a purple tinge to the sun's rays, during nine months, the purple tint had increased considerably, while pieces of the same glass, kept in the dark, had suffered no change.

Remains of Lord Byron.—The remains of this much-lamented and highly-talented nobleman are arrived at the Nore, from Missolonghi; where the ship that brought them over is now performing quarantine. It is stated that Poet's Corner, Westminster Abbey, is the hallowed spot destined to hand down his memory to posterity.

Dr. J. B. Davis has resigned from the London Dispensary, to the general regret of thousands of poor people who knew well how to appreciate kindness, attention, and professional merits.

Manuscript Lectures of Percival Pott, Surgeon—Dr. Fordyce (late Physician to Guy's Hospital) on the Natural History of Man, of the late Colin Mackenzie, on Midwifery, are to be disposed. A line addressed to the Editors of this Magazine, at the Publisher's, will be replied to.

When a man once begins to make improvements in science, or to add to the inventions of mechanism, and meets with merited encouragement, there is no knowing where or when he will stop.

Our readers are all acquainted with Mr. Weiss. His instruments are mostly known to them; and to the profession generally, he is now considered the most ingenious Surgeon's instrument manufacturer in Europe. We have presented this month one of his plates, that is, an improvement upon one of his own instruments, viz. "a Female Dilator"—the advantages of which over the original (a straight one) is, that it dilates in a straight line, a property which the first does not possess. In addition to the present (see plate) it is supplied with a catch, the turning of which permits, at pleasure, either a forward or retrograde movement. On the external part of the instrument, on an ivory plate, is a graduated dial, which shows the degree or ratio of dilation, as it may occur, from one time to another—and is, upon the whole, so neat, simple, and applicable, that it may, during the dilating process, be superintended by a nurse in the absence of the medical attendant. We need scarcely add, that it is for the extraction of calculi in the female.

LITERARY NOTICES.

Works in the Press.—The Medical and Culinary Dieteticon, digested in Gastronomical order, either for a state of Health or Disease, &c. &c By the author of the "New Domestic Medical Manual."

"Je ne vis pas pour manger,
Je mange pour vivre."

Scrapiana Medica, or Morceaux Choisis, in Prose and Verse, consisting c

Biographical and Bibliographical Gleanings—Characteristic Descriptions—Eccentric Characters—Odd Maxims—Epigrams—Monumental Inscriptions—Anecdotes, &c. &c. selected from Ancient and Modern Medical Literature, with Notes, CRITICAL, HISTORICAL, and EXPLANATORY. By J. S. F. &c.

"Well knew he the old *Esculapius*,
And *Dioscorides* and Eke Rufus,
Serapis, *Razis*, and *Avycen*,
Old *Hippocras*, *Lylyle* and Galien,
Averrois, *Damascyen* and *Constantyn*,
Bernard, and *Gadesteun* and *Gilbertyn*."
CHAUCER.

BIRTHS.—On May 3d, at Mallow, the Lady of Assistant-Surgeon Macpherson, 42d regt. of a Son.

On the 11th ult., in Manchester-square, the Lady of Dr. Bright, of a Son.

On the 15th ult. the Lady of Dr. Seymour, of George-street, Hanover-square, of a Son.

MARRIED.—At Gayfield-square, Edinburgh, on the 2d ult. T. A. Davies, Esq. Surgeon, Llanally, to Spencer Boyd, eldest daughter of A. Sivewright, Esq.

At Edinburgh, 1st ult. Dr. James Killier, Surgeon, Dunbar, to Mary, second daughter of the late Mr. G. Wauchope.

At Banff, George Craigie, Esq., M. D. Bengal Medical service, to Jane, only daughter of J. Wilson, Esq.

On Tuesday, 22d June, at Lambeth Church, by the Rev. Dr. Doyle, D. D., Martin Mangle, Esq. Surgeon, of Aldermanbury Postern, to Mary, widow of the late George Swan, Esq. Dulwich.

Obituary.

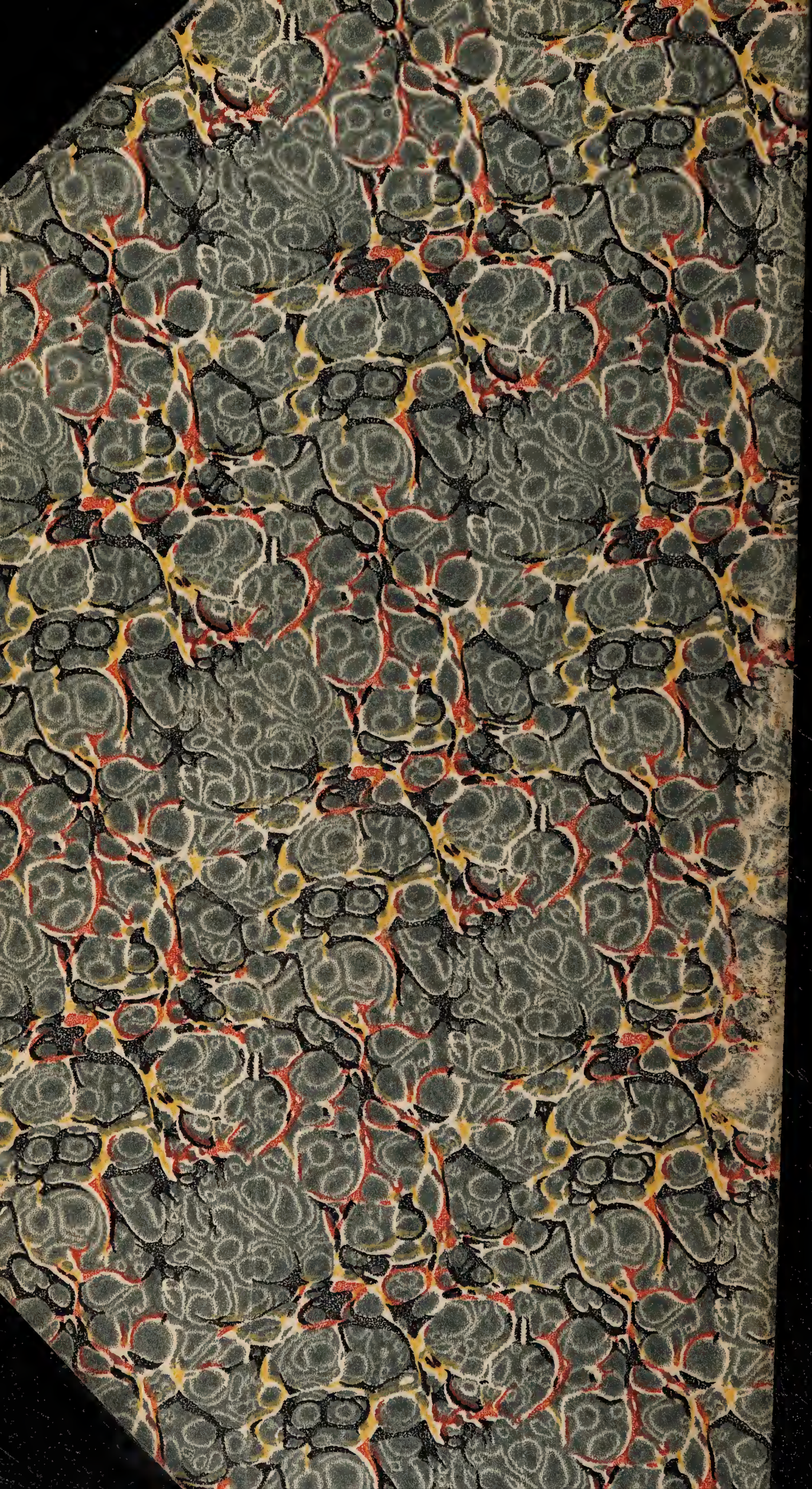
ON Wednesday, the 9th of June, at his house in South Audley street, THOMAS CHEVALIER, Esq. F.R.S. &c. &c. Surgeon Extraordinary to the King, and Professor of Anatomy and Surgery to the Royal College of Surgeons, London. Although Mr. Chevalier had for upwards of two years been suffering from severe and repeated attacks of indisposition, his death was unexpected and sudden; having been engaged in the active exercise of his profession the day previous to his dissolution. As a zealous and skilful practitioner, Mr. Chevalier was universally esteemed and respected by his professional brethren. His general and professional reading was extensive; his ardour, in the pursuit of knowledge, great; and the high character which he had attained was the deserved reward of a life devoted to the cultivation of science. Mr. C. was among the first, if not the very first, of those who obtained the Jacksonian Prize of the College of Surgeons. His Hunterian Oration may be mentioned as almost the only one of those compositions that has been read at all, or read with pleasure and advantage. He was likewise the author of a little treatise on Gun-shot Wounds, published at an early period of his professional career, and of many papers on various chirurgical subjects, interspersed in the periodical publications or in the Transactions of various learned Societies. If the Lectures delivered by Mr. C. at the College of Surgeons, and the volume lately published by him, fell somewhat short of the expectations that were formed by the profession, it must be recollected that those very expectations evinced the sense generally entertained of the merits of this gentleman, and that they were composed under the pressure of extreme ill health.

In private life, Mr. Chevalier's character stands in no need of any eulogium from us: he was generally respected, and will long live in the memory of his numerous friends. We understand that extravasation of blood in the brain was the sole and immediate cause of his death; though we have reason to believe that he had long entertained an opinion that there was disease, either of the great vessels or of the heart itself.—*Med. and Phys. Journal.*

Dec. 4th, at Aurungabad, John Ruxton Alexander, Esq. Surgeon Horse-brigade of Artillery.

On the 12th ult. at Lawricknow, Mrs. Dickson, relict of the late R. Dickson, Esq. Surgeon, Dumfries.

Lately, at Padstow, Mr. R. Palk, Surgeon, aged 84.

On Saturday, 11th of May, at the Countess Bush's, County Kilkenny, Mary Costello, aged 102. Her mother, Matilda Pukmar, died precisely at the same age. Her grandmother died at the age of 120. Her great grandmother's age is not exactly known, but it exceeded 125 years, and long before her death she had to be rocked in a cradle like an infant. Mary Costello's brother lived beyond 100 years; at the age of 90 he worked regularly, and could cut down half an acre of heavy grass in a day.

At sea 3d. June, in his 29th year, on his return from Madeira, Thomas Martineau, M. D. Before he took his degree he was Assistant-Surgeon to the Norfolk and Norwich Hospital. In that situation, as in every other, he endeared himself to all who knew him, and has left behind him the memory of virtues and talents not soon to be effaced.